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VOL. 13

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OF
AGRICULTURAL STATISTICS

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OTTAWA

J. DE LABROQUERIE TACHÉ

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1920



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DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

FIELD CROPS OF CANADA.

Report for the year ended December 31, 1919.

The Dominion Bureau of Statistics, in this number, publishes its annual report on the area, yield, quality and value of the field crops of Canada for the season of 1919, as compared with 1918. The agricultural statistics of 1919 for all the provinces have been collected in co-operation with the Provincial Governments under the system applied for the first time in 1917 in the provinces of Quebec, Saskatchewan, Alberta and British Columbia. In general, therefore, the reports of both the Dominion and Provincial Governments on the yield of crops in 1919 record identical results. In estimating the average yields per acre of wheat, barley, oats and flax, reports were collected from the postmasters of the three Prairie Provinces, and the average yields finally adopted were settled in conjunction with the officers of the Provincial Governments.

THE SEASON OF 1919.

The season opened tardily and practically no seeding had been done in the Maritime provinces and Quebec at the end of April. In Ontario very little had been done as heavy snow-falls during the last week of April had left the land too wet for tillage. In the Western provinces although the spring opened late about 60 per cent of seeding was completed by May 1st.

At the end of June the condition of the principal grain crops indicated that for the fourth successive year the yields of the Dominion would be below the average of the previous ten years.

In Manitoba and Ontario warm rains and generally favourable weather gave promise of a good harvest. In the Maritime provinces and Quebec the conditions also were generally favourable and the harvest was good.

In consequence of a continuation of the drouth throughout July the condition of the grain crops in Alberta and Saskatchewan was lower at the end of July than at the end of June. The results of harvesting showed poor to very poor yields in the southern parts of the province, and poor to good in the northern districts.

YIELD OF FIELD CROPS.

The total yield of wheat for all Canada in 1919 was returned as 193,260,400 bushels from 19,125,968 sown acres, an average yield of better than 10 bushels per acre. In 1918 the corresponding figures were 189,075,350 bushels from 17,353,902

acres, a yield per acre of 11 bushels. The yield of oats in 1919 was 394,387,000 bushels from 14,952,114 acres, an average of 26.25 bushels as compared with 426,312,500 bushels from 14,790,336 acres, an average of 28.75 bushels per acre. Barley gave a return in 1919 of 56,389,400 bushels from 2,645,509 acres, an average per acre of $21\frac{1}{4}$ bushels as compared with 77,287,240 bushels from 3,153,711 acres in 1918, an average of $24\frac{1}{2}$ bushels per acre. Of the remaining crops the total yields in 1919 were in bushels as follows, (the figures in 1918 being given within brackets): Rye 10,207,400 (8,504,400); peas 3,406,300 (4,313,400); beans 1,388,600 (3,563,380); buckwheat 10,550,800 (11,375,500); mixed grains 27,851,700 (35,662,300); flax 5,472,800 (6,055,200); corn for husking 16,940,500 (14,205,200); potatoes 125,574,900 (104,346,200); turnips, mangolds, carrots, etc. 112,288,600 (122,699,600). In 1919 there was produced 16,348,000 tons of hay and clover as compared with 14,772,300 tons in 1918. Fodder corn gave a yield of 4,942,760 tons in 1919 as against 4,787,500 tons in the previous year. The yield of sugar beets increased from 180,000 tons in 1918 to 240,000 tons. The area devoted to the growing of alfalfa has increased from 196,428 acres in 1918 to 226,869 acres in 1919 and the yield from 446,400 tons to 494,200 tons. The average yields per acre of these crops in 1919, (with 1918 averages in brackets), were, in bushels, as follows: Rye $13\frac{1}{2}$ ($15\frac{1}{4}$); peas $14\frac{3}{4}$ ($13\frac{1}{4}$); beans $16\frac{1}{2}$ ($15\frac{1}{2}$); buckwheat $23\frac{1}{2}$ ($20\frac{3}{4}$); mixed grains 31 ($38\frac{3}{4}$); flax 5 ($5\frac{3}{4}$); corn for husking 64 ($56\frac{3}{4}$); potatoes $153\frac{1}{2}$ (142); turnips 354 ($377\frac{1}{2}$). Hay in 1919 gave an average yield in tons of 1.55, fodder corn of 9.75, sugar beets of 9.80 and alfalfa of 2.20 tons as compared with 1.40 ton for hay, 9.50 for fodder corn, 10 for sugar beets and 2.25 tons for alfalfa in 1918.

WHEAT, OATS AND BARLEY IN THE PRAIRIE PROVINCES.

The total yields in 1919 were: Wheat 165,544,300 bushels from 17,750,167 acres, as compared with 164,436,100 bushels from 16,125,451 acres in 1918, and 211,953,100 bushels from 13,619,410 acres in 1917; oats in 1919 gave a yield of 235,580,000 bushels as compared with 222,049,500 bushels last year and 254,877,200 bushels in 1917; barley 36,682,400 bushels in 1919, as against 47,607,400 bushels in 1918 and 40,384,100 bushels in 1917; and flax 5,232,300 bushels as compared with 5,776,000 in 1918 and 5,835,900 in 1917.

VALUES OF FIELD CROPS.

The average values per bushel of grain crops at point of production, for Canada in 1919, according to the prices returned by Crop Correspondents, were as follows: Fall wheat \$1.97 as against \$2.08 in the two previous years; spring wheat \$1.88, as against \$2.02 in 1918 and \$1.93 in 1917; all wheat \$1.89, as compared with \$2.02 in 1918 and \$1.94 in 1917; oats 80 cents in 1919, 78 cents in 1918 and 69 cents in 1917; barley

\$1.37 as compared with \$1 and \$1.08 in 1918 and 1917; rye \$1.40 as compared with \$1.49 in 1918 and \$1.62 in 1917; peas \$2.86, as compared with \$3.00 in 1918 and \$3.54 in 1917; beans \$4.48, as compared with \$5.41 and \$7.45 respectively in 1918 and 1917; buckwheat \$1.50, as compared with \$1.58 in 1918 and \$1.46 in 1917; flax, \$4.13, as against \$3.13, in 1918 and \$2.65 in 1917; and corn for husking \$1.30, as against \$1.75 and \$1.84 in 1918 and 1917 respectively. The price per bushel of potatoes in 1919 as returned on October 31 was 95 cents, as against 98 cents in 1918 and \$1.01 in 1917; turnips, etc., are placed at 50 cents per bushel as compared with 43 cents in 1918 and 46 cents in 1917. Hay and clover is valued at \$20.72 per ton this year as against \$16.25 per ton in 1918 and \$10.33 in 1917; fodder corn is priced at \$6.92 in 1919 as compared with \$6.15 in 1918 and \$5.14 in 1917; sugar beets, \$10.86 per ton as compared with \$10.25 in 1918 and \$6.75 in 1917. The price of alfalfa in 1919 per ton is \$21.85 as compared with \$17.84 in 1918 and \$11.59 in 1917.

The total values on farms in 1919 of the principal field crops are estimated as follows, the corresponding values for 1918 being given in brackets: Wheat \$364,857,000 (\$381,677,700); oats \$317,097,000 (\$331,357,400); barley \$77,462,700 (\$77,378,670); rye \$14,240,000 (\$12,728,600); peas \$9,739,300 (\$12,899,100); beans \$6,214,800 (\$19,283,900); buckwheat \$15,831,000 (\$18,018,100); mixed grains \$37,775,400 (\$40,726,500); flax \$22,609,500 (\$18,951,000); corn for husking \$22,080,000 (\$24,902,800); potatoes \$118,894,200 (\$102,235,300); turnips, etc. \$54,958,700 (\$52,252,000); hay and clover \$338,713,200 (\$241,277,300); fodder corn \$34,179,500 (\$29,439,100); sugar beets \$2,606,000 (\$1,845,000); alfalfa \$10,800,200 (\$7,963,500).

The aggregate value of all field crops in 1919 is estimated at \$1,452,437,500, as compared with a total value of \$1,372,935,970 in 1918 and of \$1,144,636,450 in 1917. Both the acreage under crops and the value of crops produced is the highest on record. The aggregate value of all field crops exceeds that of 1918 by \$79,501,530, or $5\frac{3}{4}$ p.c. and that of 1917 by \$307,801,050, or 27 p.c.

DESCRIPTION OF TABLES.

Table I gives for Canada and the provinces the area, yield and value of the principal field crops of 1919, as compared with 1918, 1917, 1916, and 1915 with quality in the case of grain crops as indicated by the weight per measured bushel. Table II shows the area and yield of wheat, oats, barley and flaxseed in the three Prairie Provinces for the years 1917, 1918, 1919, and Table III shows for Canada and the provinces, the total estimated areas and values of field crops for the six years 1914 to 1919. For 1919 the total area under field crops is placed at 53,049,640 acres, as compared with 51,427,190 acres in 1918 and 42,602,288 acres in 1917.

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Canada—						
Fall wheat.....1915	1,030,581	28.45	29,320,600	59.71	0.90	27,149,700
1916	818,264	21.50	17,590,000	59.52	1.54	27,118,300
1917	725,300	21.50	15,533,450	59.37	2.08	32,336,900
1918	416,615	19.00	7,942,800	61.19	2.08	16,516,000
1919	672,793	23.75	16,006,000	61.20	1.97	31,521,000
Spring wheat.....1915	14,078,834	25.87	364,222,000	60.31	0.91	329,667,200
1916	14,551,445	16.85	245,191,000	56.51	1.29	316,978,100
1917	14,030,550	15.50	218,209,400	59.48	1.93	420,701,700
1918	16,937,287	10.75	181,132,550	58.69	2.02	365,151,700
1919	18,453,175	9.50	177,254,400	58.53	1.88	333,336,000
All wheat.....1915	15,109,415	26.05	393,542,600	60.19	0.91	356,816,900
1916	15,369,709	17.10	262,781,000	57.10	1.31	344,096,400
1917	14,755,850	15.75	233,742,850	59.46	1.94	453,038,600
1918	17,353,902	11.00	189,075,350	59.44	2.02	381,677,700
1919	19,125,968	10.00	193,260,400	59.12	1.89	364,857,000
Oats.....1915	11,555,681	40.24	464,954,400	36.61	0.36	171,009,100
1916	10,996,487	37.30	410,211,000	33.86	0.51	210,957,500
1917	13,313,400	30.25	403,009,800	33.55	0.69	277,065,300
1918	14,790,336	28.75	426,312,500	35.61	0.78	331,357,400
1919	14,952,114	26.25	394,387,000	34.16	0.80	317,097,000
Barley.....1915	1,718,432	31.51	54,017,100	48.26	0.52	27,985,800
1916	1,802,996	23.72	42,770,000	45.66	0.82	35,024,000
1917	2,392,200	23.00	55,057,750	46.97	1.08	59,654,400
1918	3,153,711	24.50	77,287,240	47.24	1.00	77,378,670
1919	2,645,509	21.25	56,389,400	46.32	1.37	77,462,700
Rye.....1915	121,677	20.43	2,486,200	56.32	0.77	1,921,900
1916	148,404	19.38	2,876,400	54.95	1.11	3,196,000
1917	211,880	18.25	3,857,200	53.44	1.62	6,267,200
1918	555,294	15.25	8,504,400	55.60	1.49	12,728,600
1919	753,081	13.50	10,207,400	55.09	1.40	14,240,000
Peas.....1915	196,065	17.67	3,464,250	60.74	1.65	5,724,100
1916	151,790	14.50	2,218,100	59.88	2.22	4,919,000
1917	198,881	15.25	3,026,340	59.81	3.54	10,724,100
1918	235,976	18.25	4,313,400	59.93	2.99	12,899,100
1919	230,351	14.75	3,406,300	59.60	2.86	9,739,300
Beans.....1915	43,310	16.70	723,400	59.61	3.05	2,206,800
1916	32,500	12.70	412,600	60.00	5.40	2,228,000
1917	92,457	13.75	1,274,000	59.70	7.45	9,493,400
1918	228,577	15.50	3,563,380	58.67	5.41	19,283,900
1919	83,577	16.50	1,388,600	59.99	4.48	6,214,800
Buckwheat.....1915	343,800	22.88	7,865,900	48.02	0.75	5,913,000
1916	341,500	17.50	5,976,000	46.35	1.07	6,375,000
1917	395,977	18.00	7,149,400	46.49	1.46	10,443,400
1918	548,097	20.75	11,375,500	47.41	1.58	18,018,100
1919	444,732	23.50	10,550,800	47.23	1.50	15,831,000
Mixed grains.....1915	467,001	37.51	17,517,600	44.98	0.57	10,062,300
1916	412,670	25.75	10,584,800	43.13	0.88	9,300,900
1917	497,236	32.50	16,157,080	44.41	1.16	18,801,750
1918	921,826	38.75	35,662,300	46.39	1.14	40,726,500
1919	901,612	31.00	27,851,700	44.83	1.36	37,775,400

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
Canada—con.	acres.	bush.	bush.	lb.	\$	\$
Flax.....1915	463,359	13.19	6,114,000	55.28	1.51	9,210,400
1916	657,781	12.56	8,259,800	54.99	2.04	16,889,900
1917	919,500	6.50	5,934,900	54.73	2.65	15,737,000
1918	1,068,120	5.75	6,055,200	53.72	3.13	18,951,000
1919	1,093,115	5.00	5,472,800	55.14	4.13	22,609,500
Corn for husking....1915	253,300	56.72	14,368,000	56.32	0.71	10,243,000
1916	173,000	36.25	6,282,000	56.51	1.07	6,747,000
1917	234,339	33.00	7,762,700	56.18	1.84	14,307,200
1918	250,000	56.75	14,205,200	53.97	1.75	24,902,800
1919	264,607	64.00	16,940,500	—	1.30	22,080,000
Potatoes.....1915	485,777	124.24	60,353,000	—	0.60	36,459,800
1916	472,992	133.82	63,297,000	—	0.81	50,982,300
1917	656,958	121.50	79,892,000	—	1.01	80,804,400
1918	735,192	142.00	104,346,200	—	0.98	102,235,300
1919	818,767	153.50	125,574,900	—	0.95	118,894,200
Turnips, Man- golds, etc.....1915	156,691	384.05	60,175,000	—	0.24	14,588,700
1916	141,839	264.24	36,921,100	—	0.39	14,329,000
1917	218,233	290.75	63,451,000	—	0.46	29,253,000
1918	325,037	377.50	122,699,600	—	0.43	52,252,000
1919	317,296	354.00	112,288,600	—	0.50	54,958,700
Hay and clover....1915	7,776,995	1.36	10,612,000	—	14.37	152,531,600
1916	7,821,257	1.86	14,527,000	—	11.60	168,547,900
1917	8,225,034	1.66	13,684,700	—	10.33	141,376,700
1918	10,544,625	1.40	14,772,300	—	16.25	241,277,300
1919	10,595,383	1.55	16,348,000	—	20.72	338,713,200
Grain hay (B.C.)...1919	60,390	2.50	151,000	—	29.00	4,379,000
Fodder corn.....1915	332,469	10.17	3,382,770	—	4.91	16,612,600
1916	293,058	6.65	1,907,800	—	4.92	9,396,000
1917	366,518	7.34	2,690,370	—	5.14	13,834,900
1918	502,069	9.50	4,787,500	—	6.15	29,439,100
1919	511,769	9.75	4,942,760	—	6.92	34,179,500
Sugar beets.....1915	18,000	7.83	141,000	—	5.50	775,500
1916	15,000	4.75	71,000	—	6.20	440,000
1917	14,000	8.40	117,600	—	6.75	793,800
1918	18,000	10.00	180,000	—	10.25	1,845,000
1919	24,500	9.80	240,000	—	10.86	2,606,000
Alfalfa.....1915	98,488	2.65	260,970	—	12.68	3,309,100
1916	99,350	2.91	286,750	—	10.69	3,066,000
1917	109,825	2.39	262,400	—	11.59	3,041,300
1918	196,428	2.25	446,400	—	17.84	7,963,500
1919	226,869	2.20	494,200	—	21.85	10,800,200
Prince Edward Is'd —		bush.	bush.		bush.	
Spring wheat.....1915	34,400	19.00	653,600	59.05	1.08	705,800
1916	34,500	16.75	578,000	58.79	1.52	705,800
1917	36,000	14.50	522,000	57.63	2.09	1,091,000
1918	30,352	20.00	606,000	59.93	2.22	1,344,000
1919	35,595	17.00	624,600	59.00	2.25	1,405,000
Oats.....1915	196,000	34.86	6,832,500	36.70	0.45	3,074,600
1916	199,000	37.25	7,413,000	36.93	0.61	4,522,000
1917	201,000	32.25	6,482,300	34.80	0.80	5,185,800
1918	169,729	34.50	5,839,000	36.42	0.77	4,535,000
1919	174,937	34.00	6,038,000	36.00	0.85	5,132,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Prince Ed. Isl'd—con.						
Barley.....1915	3,700	28.88	106,800	48.83	0.71	75,800
1916	3,600	29.25	105,000	47.40	0.95	100,000
1917	3,590	28.50	99,750	46.45	1.22	121,700
1918	5,672	28.50	162,000	49.31	1.25	203,400
1919	5,636	29.00	164,000	50.00	1.40	229,700
Peas.....1915	70	15.75	1,100	61.67	2.33	2,500
1916	60	22.25	1,300	59.71	2.19	2,800
1917	60	14.00	840	60.60	2.86	2,400
1918	460	16.00	7,300	60.66	2.90	21,200
1919	490	16.00	8,100	60.00	3.25	26,300
Buckwheat.....1915	2,600	29.00	75,400	48.15	0.75	56,500
1916	2,500	27.25	68,000	49.10	1.00	68,000
1917	2,500	29.00	72,500	47.80	1.32	95,700
1918	5,592	21.75	122,000	48.77	1.44	175,500
1919	4,094	20.75	87,800	48.80	1.50	132,000
Mixed grains.....1915	8,000	38.65	309,200	43.00	0.55	170,000
1916	8,000	41.25	330,000	47.60	0.75	248,000
1917	7,800	38.25	298,400	42.61	0.98	292,400
1918	13,475	44.50	600,000	45.00	1.04	623,400
1919	18,900	44.00	843,400	44.00	1.22	1,039,400
Potatoes.....1915	31,000	114.78	3,558,000	—	0.46	1,637,000
1916	31,000	206.00	6,386,000	—	0.52	3,321,000
1917	35,000	175.00	6,125,000	—	0.75	4,594,000
1918	31,543	170.00	5,362,300	—	0.63	3,378,000
1919	36,234	125.00	4,529,000	—	0.85	3,850,000
Turnips, man- 1915	7,900	449.46	3,551,000	—	0.26	923,000
golds, etc. 1916	8,000	477.00	3,816,000	—	0.28	1,068,000
1917	8,100	505.39	4,094,000	—	0.31	1,269,000
1918	8,246	520.50	4,292,000	—	0.29	1,244,700
1919	12,337	518.00	6,396,000	—	0.26	1,638,800
Hay and clover. 1915	198,000	1.77	351,000	—	per ton 12.18	4,275,000
1916	199,000	1.70	338,000	—	11.56	3,907,000
1917	197,000	1.55	305,400	—	12.67	3,869,000
1918	222,691	1.50	334,000	—	14.17	4,732,800
1919	237,883	1.80	428,000	—	20.00	8,564,000
Fodder corn.....1915	260	13.00	3,400	—	3.00	10,200
1916	250	13.00	3,300	—	2.50	8,300
1917	250	7.00	1,800	—	5.00	9,000
1918	420	5.25	2,200	—	9.00	19,800
1919	522	12.00	6,260	—	8.00	50,000
Nova Scotia—	acres.	bush.	bush.	lb.	per bush.	\$
Spring wheat.....1915	13,300	18.57	247,000	59.26	1.21	298,700
1916	13,400	19.50	261,000	59.95	1.70	444,000
1917	16,200	15.75	255,150	57.93	2.34	597,000
1918	32,737	22.25	728,000	59.43	2.36	1,718,000
1919	28,931	19.50	564,000	58.32	2.33	1,314,000
Oats.....1915	112,000	31.14	3,487,700	34.18	0.59	2,057,700
1916	116,000	34.75	4,031,000	34.19	0.71	2,862,000
1917	123,000	29.25	3,597,800	32.28	0.92	3,310,000
1918	145,036	37.25	5,403,000	34.69	1.06	5,727,000
1919	158,838	36.00	5,718,000	34.54	1.14	6,519,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
Nova Scotia—con.	acres.	bush.	bush.	lb.	\$	\$
Barley.....1915	4,900	26.20	128,400	48.39	0.80	102,700
1916	4,700	26.25	123,000	48.58	0.99	122,000
1917	4,800	24.75	118,800	46.54	1.34	159,200
1918	11,571	30.00	347,000	48.19	1.62	562,000
1919	13,894	31.25	434,000	46.97	1.77	768,000
Rye.....1915	300	15.00	4,500	56.00	1.08	4,900
1916	320	17.00	5,400	56.00	1.25	6,800
1917	300	15.00	4,500	54.50	1.67	7,500
1918	531	14.50	7,700	55.67	1.85	14,200
1919	1,046	29.50	31,000	53.00	1.55	48,000
Peas.....1915	190	18.66	3,550	59.00	2.01	7,100
1916	180	17.75	3,200	59.80	2.73	8,700
1917	170	14.25	2,400	58.50	4.44	10,700
1918	1,753	18.75	33,000	59.50	3.20	106,000
1919	1,896	20.00	38,000	58.50	3.84	146,000
Beans.....1915	840	17.50	14,700	59.83	3.87	56,800
1916	850	16.25	13,800	60.00	5.62	78,000
1917	1,000	17.75	17,750	59.00	7.95	141,100
1918	8,829	16.25	143,000	59.14	7.34	1,050,000
1919	6,859	12.75	87,000	57.56	6.37	554,000
Buckwheat.....1915	10,200	21.72	221,500	47.45	0.72	159,500
1916	10,000	24.50	245,000	46.97	0.84	206,000
1917	10,900	21.00	228,900	46.56	1.14	261,000
1918	19,342	23.00	445,000	47.10	1.35	601,000
1919	17,384	25.25	439,000	47.23	1.55	680,000
Mixed grains.....1915	4,100	34.16	140,000	43.05	0.71	99,400
1916	4,100	34.00	139,000	44.07	0.92	128,000
1917	4,000	24.00	96,000	39.91	1.24	119,000
1918	5,407	36.00	195,000	42.24	1.30	254,000
1919	8,628	37.50	218,000	46.77	1.53	334,000
Potatoes.....1915	33,700	141.23	4,759,000	—	0.58	2,760,000
1916	34,500	201.00	6,935,000	—	0.69	4,785,000
1917	41,000	174.94	7,173,000	—	0.92	6,599,000
1918	51,250	190.75	9,776,000	—	0.93	9,092,000
1919	62,060	161.00	9,992,000	—	1.09	10,891,000
Turnips, man- golds, etc. 1915	9,200	390.02	3,589,000	—	0.34	1,223,000
1916	9,000	404.00	3,636,000	—	0.42	1,527,000
1917	9,100	350.93	3,193,000	—	0.47	1,501,000
1918	23,823	391.25	9,320,700	—	0.58	5,406,000
1919	30,291	537.75	16,289,000	—	0.60	9,773,000
Hay and clover..1915	538,000	1.78 tons	958,000 tons	—	13.33 per ton	12,770,000
1916	553,000	1.80	995,000	—	12.25	12,189,000
1917	542,000	1.65	894,000	—	11.83	10,580,000
1918	605,464	1.45	878,000	—	20.00	17,560,000
1919	678,357	2.10	1,425,000	—	22.34	31,835,000
Fodder corn.....1915	500	4.64	2,300	—	7.00	16,000
1916	500	8.75	4,400	—	2.50	11,000
1917	480	9.20	4,400	—	6.00	26,400
1918	4,644	9.50	44,000	—	9.00	396,000
1919	2,960	9.50	28,000	—	8.00	224,000
Alfalfa.....1915	30	2.30	70	—	13.00	900
1916	30	5.00	150	—	15.00	2,300
1917	30	3.50	100	—	15.00	1,500

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
New Brunswick—						
Spring wheat.....1915	14,000	19.09	267,000	59.59	1.26	335,000
1916	14,000	17.25	242,000	59.20	1.72	416,000
1917	16,000	127.00	192,000	58.43	2.25	432,000
1918	49,453	19.00	940,250	59.68	2.32	2,183,700
1919	35,641	17.50	623,000	59.61	2.32	1,444,000
Oats.....1915	201,000	27.66	5,559,600	36.33	0.55	3,058,000
1916	198,000	30.50	6,039,000	35.49	0.68	4,107,000
1917	190,000	22.50	4,275,000	33.33	0.94	4,018,500
1918	224,442	31.50	7,051,400	35.32	0.97	6,877,400
1919	305,484	30.25	9,261,000	35.10	0.98	9,086,000
Barley.....1915	2,100	22.96	48,000	48.85	0.85	40,800
1916	1,900	23.75	45,000	46.70	1.00	45,000
1917	1,800	22.00	39,600	42.84	1.36	53,900
1918	6,601	24.75	163,140	47.87	1.55	253,270
1919	10,662	26.75	285,000	47.48	1.35	385,000
Rye.....1918	308	16.25	5,000	—	1.85	9,000
1919	353	20.00	7,000	56.00	2.00	14,000
Peas.....1915	420	17.08	6,700	60.27	2.52	16,900
1916	400	16.50	6,600	60.21	2.46	16,200
1917	400	15.00	6,000	60.45	2.83	17,000
1918	4,077	14.75	60,100	59.37	3.68	221,200
1919	4,697	14.75	69,000	59.85	3.03	209,000
Beans.....1915	270	21.37	5,700	60.71	4.03	23,000
1916	250	15.25	3,800	60.54	6.11	23,000
1917	300	19.50	5,850	59.00	8.75	51,200
1918	5,491	15.50	85,580	59.39	8.05	689,400
1919	6,409	16.50	106,000	58.58	5.25	556,000
Buckwheat.....1915	58,000	22.68	1,315,000	47.51	0.73	960,000
1916	53,000	22.75	1,206,000	46.51	0.84	1,013,000
1917	57,000	19.50	1,111,500	45.48	1.13	1,256,000
1918	72,483	20.75	1,499,500	47.38	1.65	2,477,000
1919	74,642	25.00	1,871,000	47.74	1.36	2,547,000
Mixed grains.....1915	900	31.50	28,400	45.80	0.71	20,000
1916	870	34.25	30,000	43.25	0.78	23,000
1917	840	19.50	16,380	43.29	1.10	18,000
1918	4,292	32.50	139,900	42.97	1.25	175,200
1919	5,297	33.75	179,000	43.83	1.23	220,000
Potatoes.....1915	40,000	144.31	5,772,000	—	0.64	3,694,000
1916	39,000	192.00	7,488,000	—	0.84	6,290,000
1917	46,000	149.80	6,891,000	—	1.13	7,787,000
1918	57,272	158.50	9,077,600	—	1.00	9,077,600
1919	75,573	142.75	10,790,200	—	0.97	10,466,000
Turnips, man- golds, etc. 1915	8,000	329.10	2,633,000	—	0.33	869,000
1916	7,700	411.00	3,165,000	—	0.45	1,424,000
1917	7,700	300.54	2,314,000	—	0.61	1,412,000
1918	18,507	350.00	6,477,500	—	0.58	3,757,000
1919	24,279	366.50	8,898,800	—	0.58	5,155,000
Hay and clover...1915	569,000	1.39	791,000	—	14.00	11,074,000
1916	574,000	1.48	850,000	—	11.27	9,563,000
1917	568,000	1.60	909,000	—	10.29	9,354,000
1918	740,637	1.50	1,111,000	—	15.30	16,998,300
1919	786,175	1.40	1,111,000	—	20.26	22,512,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
New Brunswick—con.	acres.	bush.	bush.	lb.	\$	\$
Fodder corn.....1915	110	7.00	770	—	2.50	1,900
1916	100	10.00	1,000	—	4.00	4,000
1917	85	9.00	770	—	6.00	4,600
1918	3,459	4.50	15,600	—	10.00	156,000
1919	5,906	5.00	30,000	—	8.00	240,000
Alfalfa.....1918	1,178	1.50	1,800	—	9.00	16,200
—	—	—	—	—	—	—
Quebec—						
Spring wheat.....1915	71,000	19.88	1,411,000	59.62	1.34	1,891,000
1916	64,000	15.00	960,000	57.71	1.86	1,786,000
1917	277,400	14.00	3,883,600	57.94	2.46	9,553,700
1918	365,670	17.25	6,308,000	58.82	2.28	14,382,000
1919	251,089	16.75	4,206,000	59.12	2.38	10,010,000
Oats.....1915	1,400,000	30.13	42,182,000	36.92	0.55	23,200,000
1916	1,073,000	22.75	24,411,000	33.55	0.77	18,796,000
1917	1,492,700	21.75	32,466,200	34.34	0.92	29,868,900
1918	1,932,720	27.25	52,667,000	35.98	1.00	52,667,000
1919	2,141,107	26.75	57,275,000	35.47	1.06	60,712,000
Barley.....1915	85,000	26.53	2,255,000	48.79	0.86	1,939,000
1916	72,800	20.00	1,456,000	46.67	1.15	1,674,000
1917	165,600	18.50	3,063,600	48.14	1.58	4,840,500
1918	189,202	24.00	4,551,000	48.16	1.62	7,373,000
1919	234,892	22.75	5,344,000	47.63	1.64	8,764,000
Rye.....1915	8,700	16.71	145,000	55.90	1.12	162,000
1916	8,300	14.25	118,000	53.97	1.40	165,000
1917	22,450	16.75	376,000	53.36	1.78	669,300
1918	29,063	16.25	472,000	54.78	2.10	991,000
1919	33,481	17.25	578,000	55.87	2.00	1,156,000
Peas.....1915	24,400	16.56	404,000	61.14	2.47	998,000
1916	21,600	14.00	302,000	59.95	3.22	972,000
1917	66,457	12.00	797,500	59.75	4.51	3,596,700
1918	107,386	15.50	1,664,000	60.26	4.14	6,889,000
1919	81,642	15.00	1,225,000	60.14	3.62	4,435,000
Beans.....1915	4,700	21.89	103,000	59.38	3.17	327,000
1916	4,400	17.75	78,000	60.18	5.56	434,000
1917	55,157	15.00	827,400	59.90	7.77	6,428,900
1918	109,803	17.00	1,867,000	59.45	5.72	10,679,000
1919	43,202	19.75	853,000	59.81	4.52	3,856,000
Buckwheat.....1915	104,000	24.69	2,568,000	48.17	0.84	2,157,000
1916	101,000	19.00	1,919,000	46.35	1.21	2,322,000
1917	163,577	16.50	2,699,000	46.55	1.73	4,669,300
1918	227,018	20.75	4,711,000	48.20	1.77	8,338,000
1919	170,043	24.00	4,081,000	47.72	1.70	6,938,000
Mixed grains.....1915	101,000	29.67	2,997,000	45.44	0.73	2,188,000
1916	91,000	20.25	1,843,000	44.04	0.99	1,825,000
1917	122,819	21.25	2,609,900	44.50	1.33	3,471,200
1918	194,288	27.00	5,246,000	45.49	1.46	7,659,000
1919	157,637	27.00	4,256,000	44.54	1.50	6,384,000
Flax.....1915	600	11.89	7,000	54.16	2.18	15,000
1916	500	10.50	5,300	54.50	2.50	13,300
1917	5,700	8.25	47,000	53.21	3.37	158,400
1918	7,357	11.25	83,000	54.66	3.74	310,000
1919	11,384	9.75	111,000	53.46	3.91	434,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Quebec—con.						
Corn for husking..1915	16,300	31.17	508,000	56.85	1.12	569,000
1916	13,000	24.75	322,000	56.18	1.52	489,000
1917	74,339	24.25	1,802,700	56.89	2.25	4,056,000
1918	54,690	21.75	1,190,000	56.41	2.10	2,518,000
1919	43,603	41.00	1,788,000	—	1.84	3,290,000
Potatoes.....1915	117,000	149.66	17,510,000	—	0.55	9,631,000
1916	112,000	131.00	14,672,000	—	0.97	14,232,000
1917	226,917	80.00	18,158,000	—	1.38	25,008,000
1918	264,871	147.00	38,936,000	—	0.98	38,157,000
1919	315,590	181.50	57,280,000	—	0.85	48,688,000
Turnips, man-1915	10,200	308.25	3,144,000	—	0.36	1,132,000
golds. 1916	10,000	265.00	2,650,000	—	0.48	1,272,000
1917	70,192	224.51	15,759,000	—	0.59	9,298,000
1918	95,526	295.50	28,228,000	—	0.53	14,960,800
1919	87,496	317.50	27,780,000	—	0.53	14,723,000
		tons	tons		per ton	
Hay and clover..1915	2,922,000	1.26	3,682,000	—	15.89	58,507,000
1916	2,985,000	1.75	5,224,000	—	11.00	57,464,000
1917	2,961,983	1.71	5,065,000	—	9.58	48,523,000
1918	4,533,266	1.50	6,799,900	—	15.75	107,098,400
1919	4,299,360	1.50	6,449,000	—	20.54	132,462,000
Fodder corn.....1915	34,000	8.61	293,000	—	6.39	1,872,000
1916	31,000	8.00	248,000	—	5.75	1,426,000
1917	69,030	8.50	586,800	—	5.00	2,934,000
1918	86,358	7.25	626,100	—	7.42	4,645,700
1919	74,007	8.25	611,000	—	8.41	5,139,000
Alfalfa.....1915	2,860	2.84	8,100	—	11.78	95,000
1916	2,600	2.65	7,000	—	9.50	67,000
1917	3,818	2.26	8,600	—	8.37	72,000
1918	4,144	2.25	9,300	—	11.70	109,000
1919	28,488	2.35	67,000	—	14.22	953,000
Ontario—		bush.	bush.		per bush.	
Fall wheat.....1915	972,000	28.34	27,546,000	59.41	0.93	25,618,000
1916	774,800	21.25	16,465,000	59.42	1.55	2,521,000
1917	656,500	21.50	14,114,800	59.38	2.09	29,499,900
1918	362,616	19.50	7,054,800	59.80	2.09	14,763,000
1919	619,494	24.30	15,052,000	61.33	1.97	29,519,000
Spring wheat.....1915	121,000	22.36	2,706,000	59.41	0.96	2,598,000
1916	90,200	16.25	1,466,000	57.80	1.55	2,272,000
1917	113,000	19.50	2,203,500	59.32	2.08	4,583,300
1918	351,423	23.25	8,186,200	59.84	2.03	16,638,000
1919	361,150	15.60	5,646,500	58.27	1.98	11,182,000
All wheat.....1915	1,093,000	27.67	30,252,000	59.41	0.93	28,216,000
1916	865,000	20.73	17,931,000	58.79	1.55	27,793,000
1917	769,500	21.25	16,318,300	59.36	2.09	34,083,200
1918	714,039	21.25	15,241,000	60.54	2.06	31,401,000
1919	980,644	21.20	20,698,500	59.76	1.97	40,701,000
Oats.....1915	3,095,000	39.68	122,810,000	34.67	0.39	47,896,000
1916	1,991,000	25.50	50,771,000	30.30	0.64	32,493,000
1917	2,687,000	36.50	98,075,500	34.11	0.72	70,614,400
1918	2,924,468	45.00	131,752,600	35.58	0.78	102,212,000
1919	2,674,341	29.30	78,388,000	32.76	0.91	71,378,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Ontario—con.						
Barley.....1915	449,000	34.23	15,369,000	47.83	0.56	8,607,000
1916	326,000	23.00	7,498,000	44.94	0.99	7,422,000
1917	361,000	31.00	11,191,000	47.20	1.16	12,981,600
1918	660,404	36.75	24,247,700	48.13	1.06	25,809,000
1919	569,183	23.10	13,134,000	45.81	1.32	17,215,000
Rye.....1915	78,000	19.88	1,551,000	56.89	0.79	1,225,000
1916	69,000	17.50	1,208,000	55.20	1.17	1,413,000
1917	68,000	17.75	1,207,000	55.69	1.64	1,979,500
1918	112,726	16.00	1,813,000	55.65	1.55	2,818,400
1919	140,072	15.80	2,219,000	54.97	1.48	3,279,000
Peas.....1915	169,000	17.79	3,007,000	59.86	1.54	4,631,000
1916	126,000	14.25	1,796,000	59.71	2.06	3,700,000
1917	126,000	16.75	2,110,500	59.88	3.21	6,774,700
1918	113,862	21.00	2,381,000	59.85	2.24	5,338,700
1919	127,253	14.30	1,816,500	59.97	2.31	4,180,000
Beans.....1915	37,500	16.00	600,000	59.76	3.05	1,800,000
1916	27,000	11.75	317,000	59.72	5.34	1,693,000
1917	36,000	11.75	423,000	59.42	6.79	2,872,200
1918	100,082	13.75	1,387,800	59.27	4.66	6,464,500
1919	22,920	12.60	288,500	61.74	3.79	1,039,000
Buckwheat.....1915	169,000	21.81	3,686,000	48.21	0.70	2,580,000
1916	175,000	14.50	2,538,000	45.80	1.09	2,766,000
1917	162,000	18.75	3,037,500	46.69	1.37	4,161,400
1918	223,662	20.50	4,598,000	46.96	1.40	6,426,600
1919	178,569	22.80	4,072,000	46.71	1.36	5,534,000
Mixed grains.....1915	345,000	39.91	13,769,000	44.76	0.54	7,435,000
1916	286,000	26.00	7,436,000	40.77	0.89	6,618,000
1917	295,000	37.75	11,136,300	44.99	1.12	12,472,700
1918	619,389	44.25	27,462,400	46.01	1.09	29,823,900
1919	628,761	31.40	19,735,300	44.71	1.35	26,672,000
Flax.....1915	5,000	12.38	62,000	50.78	1.72	107,000
1916	4,500	9.25	42,000	57.17	2.78	117,000
1917	4,000	13.00	52,000	55.00	3.70	192,400
1918	15,925	12.25	196,200	56.72	3.41	670,000
1919	13,717	9.40	129,500	59.86	3.48	450,500
Corn for husking.1915	237,000	58.48	13,860,000	55.75	0.69	9,674,000
1916	160,000	37.25	5,960,000	57.18	1.05	6,258,000
1917	160,000	37.25	5,960,000	54.58	1.72	10,251,200
1918	195,310	66.75	13,015,200	58.23	1.72	22,384,800
1919	221,004	68.60	15,152,500	—	1.24	18,790,000
Potatoes.....1915	155,000	92.66	14,362,000	—	0.76	10,915,000
1916	133,000	61.00	8,113,000	—	1.28	10,385,000
1917	142,000	133.67	18,981,000	—	1.00	18,981,000
1918	166,203	116.60	19,376,000	—	1.26	24,413,000
1919	157,286	96.30	15,145,000	—	1.37	20,820,000
Turnips, man- golds, etc.1915	112,000	394.42	44,175,000	—	0.21	9,277,000
1916	97,000	211.00	20,467,000	—	0.36	7,368,000
1917	94,000	340.93	32,047,000	—	0.35	11,216,000
1918	141,001	460.25	64,896,000	—	0.32	20,767,000
1919	123,029	348.00	42,756,000	—	0.35	14,027,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per ton	Total Value.
Ontario—con.	acres.	tons	tons	lb.	\$	\$
Hay and clover..1915	3,082,000	1.32	4,068,000	—	14.06	57,196,000
1916	3,059,000	2.00	6,118,000	—	11.90	72,804,000
1917	2,998,000	1.70	5,097,000	—	10.26	52,295,000
1918	3,470,036	1.32	4,596,900	—	16.50	75,848,000
1919	3,508,266	1.59	5,589,000	—	20.61	115,161,000
Fodder corn.....1915	287,000	10.63	3,051,000	—	4.76	14,523,000
1916	248,000	6.50	1,612,000	—	4.80	7,738,000
1917	265,000	7.54	1,998,000	—	5.00	9,990,000
1918	380,946	10.35	3,944,300	—	5.73	22,601,000
1919	399,549	10.05	4,014,000	—	6.30	25,304,000
Sugar beets.....1915	18,000	7.83	141,000	—	5.50	775,500
1916	15,000	4.75	71,000	—	6.20	440,000
1917	14,000	8.40	117,600	—	6.75	793,800
1918	18,000	10.00	180,000	—	10.25	1,845,000
1919	24,500	9.80	240,000	—	10.86	2,606,000
Alfalfa.....1915	60,000	2.72	163,000	—	13.41	2,186,000
1916	56,000	3.00	168,000	—	9.75	1,638,000
1917	52,000	2.74	142,500	—	10.08	1,436,000
1918	144,010	2.28	329,000	—	15.78	5,191,000
1919	146,790	2.14	314,400	—	20.20	6,351,000
Manitoba—		bush.	bush.		per bush.	
Fall wheat.....1915	2,705	23.29	63,000	61.33	0.90	56,400
1916	3,829	15.93	61,000	—	1.40	85,400
1917	3,860	22.25	85,900	62.33	2.20	189,000
1918	2,734	18.00	49,000	—	2.06	101,000
Spring wheat.....1915	2,797,719	24.76	69,274,000	61.18	0.90	62,606,500
1916	2,721,896	10.88	29,606,000	51.23	1.23	36,415,400
1917	2,445,000	16.75	40,953,800	60.82	2.05	83,955,300
1918	2,980,968	16.25	48,142,100	60.16	2.06	99,173,000
1919	2,880,301	14.25	40,975,300	57.22	1.92	78,706,000
All wheat.....1915	2,800,424	24.76	69,337,000	61.18	0.90	62,662,900
1916	2,725,725	10.88	29,667,000	—	1.23	36,500,800
1917	2,448,860	16.75	41,039,700	60.86	2.05	84,144,300
1918	2,983,702	16.35	48,191,100	—	2.06	99,274,000
Oats.....1915	1,317,365	38.52	50,750,000	36.36	0.35	17,912,800
1916	1,443,599	33.55	48,439,000	33.05	0.49	23,735,100
1917	1,500,000	30.25	45,375,000	27.27	0.67	30,401,300
1918	1,714,894	31.75	54,473,500	35.21	0.71	38,676,000
1919	1,847,267	31.25	57,698,000	33.42	0.72	41,420,000
Barley.....1915	567,080	29.38	16,658,000	47.70	0.51	8,420,400
1916	687,503	19.97	13,729,000	42.78	0.80	10,983,200
1917	708,000	22.50	15,930,000	46.27	1.07	17,045,100
1918	1,102,965	25.25	27,963,400	48.54	0.89	24,887,000
1919	893,947	19.25	17,149,400	43.90	1.17	20,137,000
Rye.....1915	11,507	18.08	208,000	57.55	0.80	167,100
1916	30,050	18.54	557,000	56.50	1.06	590,400
1917	37,000	17.25	638,300	54.03	1.62	1,034,000
1918	240,469	16.25	3,935,700	73.66	1.41	5,549,000
1919	298,932	13.75	4,089,400	54.89	1.28	5,228,000
Peas.....1919	5,666	14.25	81,400	60.00	2.08	170,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
Manitoba—con.	acres.	bush.	bush.	lb.	\$	\$
Mixed grains.....	1915 659	33.38	22,000	43.00	0.48	10,600
	1916 1,400	32.25	45,000	42.00	0.45	20,300
	1917 1,400	31.00	43,400	—	1.25	54,250
	1918 30,309	28.25	856,000	43.50	1.03	882,000
	1919 30,355	25.00	759,000	40.56	1.40	1,063,000
Flax.....	1915 14,505	8.27	120,000	55.00	1.61	193,300
	1916 15,684	13.38	210,000	—	2.13	447,300
	1917 16,300	9.00	146,700	54.50	2.85	418,100
	1918 107,961	10.00	1,091,000	54.72	3.15	3,437,000
	1919 57,379	9.00	520,300	55.05	4.26	2,215,000
Potatoes.....	1915 29,878	85.85	2,565,000	—	0.64	1,636,100
	1916 31,987	147.22	4,709,000	—	0.61	2,872,500
	1917 34,400	105.90	3,643,000	—	0.76	2,769,000
	1918 45,000	185.00	8,325,000	—	0.56	4,662,000
	1919 42,000	126.00	5,287,500	—	0.81	4,266,000
Turnips, man- golds, etc.	1915 2,658	250.19	665,000	—	0.42	282,500
	1916 3,118	145.00	452,000	—	0.49	221,500
	1917 2,500	135.12	463,000	—	0.63	292,000
	1918 9,910	251.75	2,494,800	—	0.44	1,097,700
	1919 6,045	184.00	1,113,000	—	0.60	663,000
Hay and clover..	1915 88,478	1.02 tons	90,000 tons	—	9.43 per ton	848,500
	1916 77,642	1.83	142,000	—	7.80	1,107,600
	1917 75,000	1.00	75,000	—	11.11	833,300
	1918 74,000	1.00	74,000	—	16.00	1,184,000
	1919 260,378	1.50	401,400	—	16.99	6,818,000
Fodder corn.....	1915 7,591	2.63	20,000	—	6.18	123,600
	1916 9,830	2.75	27,000	—	4.67	126,000
	1917 9,800	4.86	47,600	—	7.50	357,000
	1918 12,340	5.50	67,900	—	10.50	713,000
	1919 16,867	6.80	114,500	—	13.28	1,520,000
Alfalfa.....	1915 3,671	1.36	5,000	—	12.20	61,000
	1916 4,422	2.75	12,200	—	11.83	144,300
	1917 4,400	2.07	9,100	—	13.45	122,400
	1918 3,600	2.25	8,100	—	18.00	145,800
	1919 5,181	2.20	11,400	—	22.40	256,200
Saskatchewan—		bush.	bush.		per bush.	
Fall wheat.....	1915 9,968	26.28	262,000	—	0.92	240,900
	1916 15,258	21.24	324,000	59.50	1.41	456,800
	1917 10,000	17.00	170,000	60.00	2.07	351,900
Spring wheat.....	1915 8,919,292	25.12	224,050,000	60.75	0.91	203,647,100
	1916 9,016,851	16.33	147,235,000	55.18	1.28	188,460,800
	1917 8,263,250	14.25	117,751,300	60.92	1.95	229,615,000
	1918 9,249,260	10.00	92,493,000	60.97	1.99	184,061,000
	1919 10,587,363	8.50	89,994,000	59.00	1.84	165,589,000
All wheat.....	1915 8,929,260	25.12	224,312,000	—	0.91	203,888,000
	1916 9,032,109	16.34	147,559,000	55.27	1.28	188,917,600
	1917 8,273,250	14.25	117,921,300	60.91	1.95	229,966,900
Oats.....	1915 3,336,245	43.48	145,066,000	37.48	0.32	46,125,700
	1916 3,791,807	43.06	163,278,000	35.76	0.46	75,107,900
	1917 4,521,600	27.25	123,213,600	34.58	0.62	76,392,400
	1918 4,988,499	21.50	107,253,000	34.38	0.70	75,077,000
	1919 4,837,747	23.10	112,157,000	35.48	0.70	78,510,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Saskatchewan—con.						
Barley.....	1915 299,993	31.74	9,523,000	47.54	0.46	4,391,300
	1916 367,207	27.00	9,916,000	46.02	0.77	7,633,300
	1917 669,900	21.00	14,067,900	46.84	1.00	14,067,900
	1918 699,296	17.00	11,888,000	46.10	0.88	10,461,000
	1919 492,586	8.20	8,971,000	46.87	1.08	9,689,000
Rye.....	1915 7,207	28.17	203,000	55.17	0.64	130,500
	1916 22,759	24.08	548,000	55.91	1.10	602,800
	1917 53,250	18.75	998,400	43.00	1.63	1,627,400
	1918 123,500	11.50	1,420,000	55.19	1.50	2,130,000
	1919 190,482	10.50	2,000,000	55.52	1.31	2,620,000
Peas.....	1915 525	15.43	8,100	61.00	1.72	13,900
	1916 1,600	32.50	52,000	60.00	2.25	117,000
	1917 2,605	17.25	44,900	60.00	4.00	179,600
	1918 4,251	20.00	85,000	60.00	1.50	128,000
	1919 4,853	18.00	87,300	60.00	4.00	349,000
Beans.....	1918 861	18.00	15,000	—	6.45	97,000
	1919 1,820	10.00	18,200	60.00	4.00	72,800
Mixed grains.....	1915 2,372	25.30	60,000	48.33	0.69	41,600
	1916 14,150	35.00	495,300	40.00	0.46	227,800
	1917 39,500	32.00	1,264,000	50.00	1.25	1,580,000
	1918 23,449	21.00	492,000	45.00	1.10	541,000
	1919 22,017	35.00	771,000	—	1.40	1,079,000
Flax.....	1915 395,254	13.30	5,255,000	55.89	1.51	7,928,400
	1916 542,034	12.35	6,692,000	55.29	2.23	14,923,200
	1917 753,700	6.25	4,710,600	55.55	2.60	12,247,600
	1918 840,957	5.00	4,205,000	54.43	3.10	13,036,000
	1919 929,945	4.80	4,490,000	53.82	4.14	18,589,000
Potatoes.....	1915 34,885	110.28	3,847,000	—	0.68	2,626,900
	1916 46,989	155.76	7,319,000	—	0.62	4,537,800
	1917 67,700	133.00	9,010,000	—	0.85	7,659,000
	1918 59,793	116.25	6,950,900	—	0.96	6,672,900
	1919 66,176	170.00	11,250,000	—	0.89	10,013,000
Turnips,mangolds, etc.....	1915 1,245	232.93	290,000	—	0.31	91,200
	1916 1,621	252.93	410,000	—	0.57	233,700
	1917 11,104	155.55	1,727,000	—	0.91	1,572,000
	1918 9,760	225.75	2,203,300	—	0.91	2,005,000
	1919 13,932	257.75	3,591,000	—	1.12	4,022,000
Hay and clover...		tons.	tons.		per ton.	
	1915 25,113	1.39	35,000	—	8.39	293,500
	1916 25,154	2.35	59,000	—	5.85	345,200
	1917 260,275	1.42	369,600	—	10.12	3,740,000
	1918 315,117	1.15	362,400	—	11.92	4,319,800
	1919 265,417	1.05	279,000	—	17.00	4,743,000
Fodder corn.....	1915 1,877	2.40	4,500	—	6.49	29,200
	1916 2,253	2.60	5,900	—	6.00	35,400
	1917 15,658	2.00	31,300	—	8.00	250,400
	1918 11,186	5.65	63,200	—	10.50	663,600
	1919 6,690	12.50	84,000	—	12.50	1,050,000
Alfalfa.....	1915 2,620	1.83	4,800	—	9.48	45,500
	1916 3,086	2.85	8,800	—	10.25	90,200
	1917 9,500	1.61	15,300	—	13.40	205,000
	1918 6,943	1.40	9,700	—	17.50	169,800
	1919 11,526	1.60	18,400	—	27.50	506,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Alberta—						
Fall wheat.....1915	39,908	31.30	1,249,000	61.32	0.84	1,051,900
1916	18,177	30.20	549,000	61.19	1.39	763,100
1917	51,700	20.50	1,059,900	60.53	1.98	2,098,600
1918	44,065	15.00	661,000	60.00	1.92	1,269,000
1919	40,600	15.75	640,000	60.80	1.95	1,248,000
Spring wheat.....1915	2,098,123	31.12	65,289,000	61.57	0.88	57,273,700
1916	2,586,798	24.95	64,539,000	58.00	1.33	85,836,900
1917	2,845,600	18.25	51,932,200	60.86	1.73	89,842,700
1918	3,848,424	6.00	23,091,000	59.94	1.92	44,335,000
1919	4,241,903	8.00	33,935,000	60.07	1.83	62,101,000
All wheat.....1915	2,138,031	31.12	66,538,000	61.52	0.88	58,325,600
1916	2,604,975	24.99	65,088,000	58.45	1.33	86,600,000
1917	2,897,300	18.25	52,992,100	60.81	1.74	91,941,300
1918	3,892,489	6.00	23,752,000	59.97	1.92	45,604,000
1919	4,282,503	8.00	34,575,000	60.11	1.83	63,349,000
Oats.....1915	1,827,071	45.91	83,876,000	39.76	0.31	25,532,900
1916	2,124,081	48.11	102,199,000	37.36	0.46	47,011,500
1917	2,537,900	34.00	86,288,600	37.09	0.63	54,361,800
1918	2,651,548	22.75	60,323,000	35.94	0.73	44,036,000
1919	2,767,872	23.75	65,725,000	36.60	0.64	42,064,000
Barley.....1915	304,009	32.31	9,822,000	49.57	0.44	4,340,400
1916	336,586	29.04	9,774,000	46.18	0.71	6,939,500
1917	472,100	22.00	10,386,200	45.16	0.98	10,178,500
1918	470,073	16.50	7,756,000	44.17	0.97	7,523,000
1919	414,212	25.50	10,562,000	47.00	1.86	19,645,000
Rye.....1915	15,963	23.47	374,726	56.63	0.62	232,400
1916	17,975	24.49	440,000	53.71	0.95	418,000
1917	30,880	20.50	633,000	55.25	1.50	949,500
1918	47,877	17.25	826,000	54.90	1.41	1,165,000
1919	83,804	14.00	1,173,000	55.14	1.42	1,666,000
Peas.....1915	160	20.00	3,200	62.00	2.09	6,700
1916	650	20.00	13,000	57.50	2.25	29,300
1917	1,851	17.50	32,400	60.00	2.00	64,800
1918	1,994	18.00	36,000	60.00	1.50	54,000
1919	1,603	18.00	29,000	60.00	3.00	87,000
Beans.....1918	763	18.00	14,000	60.00	6.45	90,000
1919	690	10.00	6,900	60.00	4.00	28,000
Mixed grains.....1915	2,370	37.13	88,000	47.20	0.52	45,700
1916	4,550	30.00	136,500	36.00	0.35	47,800
1917	24,027	25.75	618,700	51.50	1.20	742,400
1918	27,989	21.50	602,000	40.00	1.15	692,000
1919	26,000	36.25	943,000	57.00	0.83	783,000
Flax.....1915	48,000	13.96	670,000	56.37	1.44	966,700
1916	95,063	13.79	1,310,500	55.91	1.06	1,389,100
1917	139,800	7.00	978,600	54.00	2.78	2,720,500
1918	95,920	5.00	480,000	55.25	3.12	1,498,000
1919	80,690	2.75	222,000	55.75	4.15	921,000
Potatoes.....1915	28,314	142.12	4,024,000	—	0.44	1,779,800
1916	29,216	163.71	4,783,000	—	0.53	2,535,000
1917	48,917	151.46	7,409,000	—	0.76	5,631,000
1918	44,247	70.50	3,119,400	—	1.11	3,462,500
1919	45,848	179.75	8,241,200	—	0.83	6,840,200

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
	acres.	bush.	bush.	lb.	\$	\$
Alberta—con.						
Turnips, man- 1915	1,688	235.19	397,000	—	0.29	116,000
golds, etc. 1916	1,700	279.41	475,000	—	0.61	289,800
1917	10,947	207.56	2,272,000	—	0.74	1,681,000
1918	12,506	188.50	2,357,400	—	0.66	1,555,900
1919	12,500	221.50	2,768,800	—	1.06	2,934,900
		tons.	tons.		per ton.	
Hay and clover... 1915	187,404	1.31	246,000	—	7.60	1,870,600
1916	173,461	1.93	334,000	—	8.62	2,879,100
1917	493,522	1.48	730,400	—	10.92	7,976,000
1918	469,000	0.85	398,700	—	15.82	6,307,400
1919	433,296	1.10	476,600	—	20.89	9,956,200
Fodder corn..... 1915	701	3.42	2,400	—	6.13	14,700
1916	675	2.56	1,700	—	9.00	15,300
1917	3,976	1.00	4,000	—	7.00	28,000
1918	700	5.50	3,800	—	10.50	40,000
1919	900	5.58	5,000	—	10.50	52,500
Alfalfa..... 1915	17,207	2.15	37,000	—	7.64	282,700
1916	20,612	2.65	54,600	—	10.70	584,200
1917	31,396	2.05	64,400	—	10.73	691,000
1918	24,285	2.00	48,600	—	21.50	1,044,900
1919	21,553	2.00	43,000	—	29.16	1,254,000
British Columbia—		bush.	bush.		per bush.	
Fall wheat..... 1915	6,000	33.44	200,600	60.46	0.91	182,500
1916	6,200	30.75	191,000	61.00	1.53	292,000
1917	3,240	31.75	102,850	60.67	1.92	197,500
1918	7,200	24.75	178,000	59.67	2.15	383,000
1919	12,699	24.75	314,000	59.50	2.40	754,000
Spring wheat..... 1915	10,000	32.43	324,400	58.40	0.96	311,400
1916	9,800	31.00	304,000	59.55	1.54	468,000
1917	18,100	28.50	515,850	59.55	2.00	1,031,700
1918	29,000	22.00	638,000	60.25	2.08	1,327,000
1919	31,202	22.00	686,000	58.50	2.31	1,585,000
All wheat..... 1915	16,000	32.80	525,000	59.32	0.94	493,900
1916	16,000	30.94	495,000	60.16	1.54	760,000
1917	21,340	29.00	618,700	59.94	1.99	1,229,200
1918	36,200	22.50	816,000	59.96	2.09	1,710,000
1919	43,901	22.75	1,000,000	59.00	2.34	2,339,000
Oats..... 1915	71,000	61.84	4,390,600	36.28	0.49	2,151,400
1916	60,000	60.50	3,630,000	37.15	0.64	2,323,000
1917	60,200	53.75	3,235,800	35.50	0.90	2,912,200
1918	39,000	39.75	1,550,000	34.17	1.00	1,550,000
1919	45,021	47.25	2,127,000	36.00	1.07	2,276,000
Barley..... 1915	2,650	40.36	106,900	49.89	0.64	68,400
1916	2,700	45.75	124,000	47.60	0.83	103,000
1917	5,500	29.25	160,900	48.67	1.28	206,000
1918	7,927	26.50	209,000	52.50	1.47	307,000
1919	10,497	33.00	346,000	47.75	1.82	630,000
Rye..... 1918	820	30.00	25,000	60.00	2.07	52,000
1919	4,911	22.50	110,000	54.75	2.08	229,000

I. Area, Yield, Quality and Value of Principal Field Crops in Canada, 1915-19—Con.

Field Crops.	Area.	Yield per acre.	Total Yield.	Weight per measured bushel.	Average price per bushel.	Total Value.
British Columbia—con.	acres.	bush.	bush.	lb.	\$	\$
Peas.....	1915 1,300	29.75	38,700	60.00	1.24	48,000
	1916 1,300	33.75	44,000	61.20	1.67	73,000
	1917 1,338	23.75	31,800	59.83	2.46	78,200
	1918 2,193	21.50	47,000	60.00	3.00	141,000
	1919 2,251	23.00	52,000	59.00	2.60	137,000
Beans.....	1918 2,748	18.50	51,000	—	4.20	214,000
	1919 1,677	17.25	29,000	60.00	3.75	109,000
Mixed grains.....	1915 2,600	40.00	104,000	—	0.50	52,000
	1916 2,600	50.00	130,000	52.00	1.25	163,000
	1917 1,850	40.00	74,000	—	0.70	51,800
	1918 3,228	21.50	69,000	—	1.10	76,000
	1919 4,017	36.50	147,000	50.00	1.37	201,000
Potatoes.....	1915 16,000	247.28	3,956,000	—	0.45	1,780,000
	1916 15,300	189.00	2,892,000	—	0.70	2,024,000
	1917 15,024	166.55	2,502,000	—	0.69	1,726,400
	1918 15,013	228.00	3,423,000	—	0.97	3,320,300
	1919 18,000	170.00	3,060,000	—	1.00	3,060,000
Turnips, man- golds, etc.	1915 3,800	455.61	1,731,000	..	0.39	675,000
	1916 3,700	500.00	1,850,000	—	0.50	925,000
	1917 4,590	344.58	1,582,000	—	0.64	1,012,000
	1918 5,758	422.00	2,429,900	—	0.60	1,457,900
	1919 7,387	365.00	2,696,000	—	0.75	2,022,000
Hay and clover...	1915 167,000	tons 2.34	tons 391,000	—	per ton 14.57	5,697,000
	1916 175,000	2.67	467,000	—	17.75	8,289,000
	1917 129,254	1.85	239,000	—	17.60	4,206,400
	1918 114,414	1.90	217,400	—	33.25	7,228,600
	1919 126,251	1.50	189,000	—	35.25	6,662,000
Grain hay.....	1919 60,390	2.50	151,000	—	29.00	4,379,000
Fodder corn.....	1915 430	12.62	5,400	—	4.00	22,000
	1916 450	10.00	4,500	—	7.05	32,000
	1917 2,239	7.00	15,700	—	15.00	235,500
	1918 2,016	10.10	20,400	—	10.00	204,000
	1919 4,368	11.50	50,000	—	12.00	600,000
Alfalfa.....	1915 12,100	3.52	43,000	—	14.84	638,000
	1916 12,600	2.88	36,000	—	15.00	540,000
	1917 8,681	2.58	22,400	—	22.92	513,400
	1918 12,268	3.25	39,900	—	32.25	1,286,800
	1919 13,331	3.00	40,000	—	37.00	1,480,000

¹NOTE.—Of 46,571 acres sown to spring wheat 33 per cent or 15,369 acres were used green or turned into hay. Of 90,042 acres sown to oats 50 per cent or 45,021 acres were used green or turned into hay. These two appear as "Grain hay".

NOTE.—Prices of potatoes are as returned October 31.

II.—Areas and Yields of Wheat, Oats, Barley and Flaxseed in the three Prairie Provinces, 1917-19.

Provinces.	1917.	1918.	1919.	1917.	1918.	1919.
	acres	acres	acres	bush.	bush.	bush.
Prairie Provinces—						
Wheat.....	13,619,410	16,125,451	17,750,167	211,953,100	164,436,100	165,544,300
Oats.....	8,559,500	9,354,941	9,452,386	254,877,200	222,049,500	235,580,000
Barley.....	1,850,000	2,272,334	1,800,745	40,384,100	47,607,400	36,682,400
Flax.....	909,800	1,044,838	1,068,014	5,835,900	5,776,000	5,232,300
Manitoba—						
Wheat.....	2,448,860	2,983,702	2,880,301	41,039,700	48,191,100	40,975,300
Oats.....	1,500,000	1,714,894	1,847,267	45,375,000	54,473,500	57,698,000
Barley.....	708,000	1,102,965	893,947	15,930,000	27,963,400	17,149,400
Flax.....	16,300	107,961	57,379	146,700	1,091,000	520,300
Saskatchewan—						
Wheat.....	8,273,250	9,249,260	10,587,363	117,921,300	92,493,000	89,994,000
Oats.....	4,521,600	4,988,499	4,837,747	123,213,600	107,253,000	112,157,000
Barley.....	669,900	699,296	492,586	14,067,900	11,888,000	8,971,000
Flax.....	753,700	840,957	929,945	4,710,600	4,205,000	4,490,000
Alberta—						
Wheat.....	2,897,300	3,892,489	4,282,503	52,992,100	23,752,000	34,575,000
Oats.....	2,537,900	2,651,548	2,767,372	86,288,600	60,323,000	65,725,000
Barley.....	472,100	470,073	414,212	10,386,200	7,756,000	10,562,000
Flax.....	139,800	95,920	80,690	978,600	480,000	222,000

III. Total Areas and Values of Field Crops in Canada, 1914-19.

AREAS.

Provinces.	1914.	1915.	1916.	1917.	1918.	1919.
	acres.	acres.	acres.	acres.	acres.	acres.
Canada.....	33,436,675	39,140,460	38,930,333	42,602,288	51,427,190	53,049,640
P. E. Island.....	461,510	481,930	485,910	491,210	448,180	526,628
Nova Scotia.....	693,860	727,260	746,580	752,980	910,387	1,011,144
New Brunswick.....	904,055	893,800	889,220	888,125	1,188,200	1,335,118
Quebec.....	4,863,850	4,901,760	4,590,200	5,778,139	8,201,362	7,973,021
Ontario.....	8,973,700	9,391,500	7,637,500	8,233,500	10,000,063	9,915,884
Manitoba.....	4,671,790	4,843,816	5,030,960	4,837,660	6,325,150	6,344,318
Saskatchewan.....	9,238,000	13,036,596	13,850,769	14,678,042	16,332,872	17,430,554
Alberta.....	3,369,270	4,570,918	5,409,544	6,692,616	7,739,391	8,170,971
British Columbia.....	260,640	292,880	289,650	250,016	241,585	342,002

VALUES.

	\$	\$	\$	\$	\$	\$
Canada.....	638,580,300	825,370,600	886,494,900	1,144,636,450	1,372,935,970	1,452,437,500
P. E. Island.....	11,544,000	10,930,400	14,124,100	16,530,000	16,277,800	22,067,200
Nova Scotia.....	21,969,700	19,556,700	22,369,800	23,313,400	42,486,200	63,086,000
New Brunswick.....	20,045,100	20,092,000	22,924,200	24,404,200	42,891,270	52,834,000
Quebec.....	99,279,000	104,633,000	102,937,300	153,197,900	271,776,900	307,944,000
Ontario.....	196,220,000	207,043,500	190,646,000	251,095,100	384,013,900	373,507,500
Manitoba.....	65,528,400	92,318,800	76,749,000	137,470,750	180,507,500	162,462,200
Saskatchewan.....	152,751,500	265,605,700	292,773,900	349,488,200	299,362,100	296,821,800
Alberta.....	59,779,600	93,514,200	148,738,600	176,965,800	113,072,700	149,580,800
British Columbia.....	11,463,000	11,625,700	15,232,000	12,171,100	17,547,600	24,124,000

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The temperatures recorded during December range lower than usual,—the highest being 44.0, the lowest —16.6 and the mean 14.4: while a year ago the maximum reading of the thermometer was 42.6, the minimum —4.8 and the mean temperature 19.67. The precipitation totals only 1.04 inches, made up of 0.12 of an inch of rain and 9.25 inches of snow; in the closing month of 1918, it amounted to 3.34 inches, consisting of 1.34 inches of rain and 20.0 inches of snow. The average precipitation for December during the eight previous years was 2.82 inches. The bright sunshine recorded during the month, averaged 3.32 hours a day, which is more than usual, as compared with 2.93 hours for this time last year.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—“The temperatures recorded during the first two weeks of December were moderate, the prevailing wind being from the south-west. The third week was bright and cold, the thermometer dropping to —14.0 on the 17th, this being one of the coldest snaps recorded here for this time of year. The weather moderated by Christmas, but the month closes with the thermometer hovering around zero again. The precipitation has been light, and there is only about four or five inches of snow on the ground at the end of the year, and, for moving heavy loads, wheels are still being utilized. The greatest movement of freight that has ever occurred from this Province in the same length of time, has taken place within the past few months; in one period of six weeks, the car-ferry carried over twenty-eight hundred standard cars of freight. Live stock, which went into winter quarters in good condition, is doing well. The butter factories will have an increased output over former years. Good stockers have been fairly plentiful, and quite a good number are being fed, notwithstanding the high prices of feeds. A new office building for the Charlottetown Station was practically completed during the month. The birds in the Egg-laying Contest, which started November 1, were not so mature, on the whole, as those of a year ago, and they have been slow in commencing to lay; most of the pens, however, started before the close of the year, and should do well towards the end of the contest.”

Kentville, N.S.—W. S. Blair, Superintendent, reports:—“December has been cold and bright, with very little snowfall. The thermometer has registered below zero on eight days, the lowest being —11.0, on the 18th. The mean temperature for the month is 20.8, while 25.37 was the average mean temperature for the corresponding period of the five previous years. The precipitation aggregates 3.56 inches, made of 2.66 inches of rain and 9.0 inches of snow; while the average for the corresponding period of the five previous years was 3.73 inches, consisting of 1.98 inches of rain and 17.5 inches of snow. The sunshine totals 83.8 hours, being the most during any December since 1914; the average for the five previous years was 56.36 hours. The cold has made a good bottom for lumbering operations and for getting out wood, and the snowfall, although light, has made sledding possible in many places.”

Nappan, N.S.—W. W. Baird, Superintendent, reports,—“The temperatures recorded during December have been much lower than usual, the mean being only 17.43, and the thermometer has registered below zero on eight different days. The precipitation totals 2.05 inches, made up of 1.2 inches of rain and 8.5 inches of snow. Most of the snow was carried away by the rain and at no time has sleighing been general. The bright sunshine aggregates 98.3 hours, which is considerably more than usual. All classes of live stock are thriving; and there is a brisk demand for all kinds of farm products, hay selling at from \$23 to \$24 a ton, oats \$1.00 to \$1.10 a bushel, potatoes \$3.50 a barrel, and finished beef cattle at \$10.00 to \$10.50 per hundred pounds live weight. The Maritime Winter Fair, which was discontinued during the war, was again held at Amherst, from December 15 to 18, and proved very successful.”

Fredericton, N.B.—W. W. Hubbard, Superintendent, reports:—“December has been fine and cold, with enough snowfall to make good sleighing, and, as there has been no drifting, the fields are well covered. There has been just enough mild weather to make conditions favourable for fruit trees. Live stock generally, is in good condition, with roots and fodder plentiful; but the prevailing high prices are causing the marketing of a good deal in the way of turnips and hay, which will necessitate the selling of many animals that should be fed.”

Ste. Anne de la Pocatière, Que.—Jos. Begin, Superintendent, reports:—“December has been unusually cold, especially since the 15th, below-zero temperatures being recorded on five consecutive days. The highest temperature recorded is 42.5, the lowest -26.6 and the mean 13.3, compared with extremes of 42.5 and -4.2, and a mean temperature of 16.0 for the corresponding period of 1918. The precipitation totals 1.20 inches, made up of .40 of an inch of rain and 8.0 inches of snow, as against .80 of an inch a year ago. The bright sunshine averages 1.72 hour a day, compared with 2.6 hours a day for December 1918. The little snow which fell during the month has drifted to the sheltered spots, leaving the open fields completely bare. The roads have not been satisfactory for either wagons or sleighs, both of which have been used during the last three weeks. The absence of snow and the persistent cold have resulted in a great scarcity of water, compelling many farmers to carry water from a distance. More feed of all kinds than usual is being consumed by live stock.”

Cap Rouge, Que.—G. A. Langelier, Superintendent, reports:—“December has been colder, drier and brighter than the average for the corresponding month of the last seven years; the figures being, respectively, 9.64 and 16.58 for mean temperature, 1.59 and 3.19 inches for precipitation, and 67.4 and 51.8 hours for sunshine. Farmers have taken advantage of the very good sleighing to draw produce to the railway stations and to Quebec city, also to haul their next year's fire-wood. At the Station, the main lines of work engaging attention have included caring for live stock and poultry, hauling feed

and manure, cleaning seeds for the Station and for distribution, and repairing implements, so that the latter may be ready when required in the spring."

Lennoxville, Que.—J. A. McClary, Superintendent, reports:—"The weather during December has been quite cold, the thermometer dropping below zero on sixteen days, which occurred but six times during the corresponding period of last year. The highest temperature recorded is 45.0, the lowest -23.0 and the mean 11.37; while a year ago the maximum was 48.0, the minimum -18.0 and the mean temperature 20.75. The sunshine aggregates 98.3 hours, as against 34.6 hours for the same month last year. The precipitation amounts to 1.05 inches, while a year ago it totalled 2.89 inches. The St. Francis River, which runs through the Station, was frozen over on December 16; while last year the weather was so mild that it was not frozen over until January 7. The limited amount of snow and the severe cold weather have caused the frost to penetrate very deeply into the ground. Farmers are making preparations now for harvesting their supply of ice for the coming season; but scarcity of snow is delaying the getting of their supplies of fire-wood."

Brandon, Man.—W. C. McKillican, Superintendent, reports:—"The extreme cold of October and November continued and became intensified in the first part of December, the temperatures recorded up to the 17th being exceptionally low for so early in the winter. The weather during the following week was remarkably mild and pleasant and it has remained comparatively mild until the end of the month. The snowfall has been light. At the Experimental Farm, the time of the men has been devoted chiefly to ordinary routine work, such as the care of the live stock and poultry."

Indian Head, Sask.—N. D. Mackenzie, Acting Superintendent, reports:—"The weather during December has been somewhat variable; from the 1st to the 3rd was cold, from the 4th to the 7th mild; from the 8th to the 17th very cold, followed by a mild spell for the balance of the month. Although the snowfall has been light, sleighing has been good, as, owing to the absence of winds, the snow has remained on the roads. There is sufficient feed in this section to carry all live stock through the winter; but, on account of the serious shortage in other districts, any surplus commands high prices. Rather fewer sows than usual are being bred this year by farmers hereabouts. The work on the Farm has consisted mainly of the usual routine of cleaning grain and caring for the live stock. During the month, a carload of selected seed grain was shipped to Ottawa for distribution. An experiment has been started to ascertain the value of 'Grade A' screenings in fattening steers."

Rosthern, Sask.—W. A. Munro, Superintendent, reports:—"The mean temperature for December is 1.62, which is two and one-half degrees lower than the average for the past ten years. Live stock throughout the district is in much poorer condition than usual, because of the shortage of feed. Many cattle are reported to be dying from some unknown disease, which seems to be due more to ill-nourishment than any other cause. There has taken place the first sale of poultry at this Station, consisting of dressed birds.

Cockerels averaging five pounds each were sold at 30 cents per pound f.o.b.; these were fasted, dry plucked and undrawn. It is significant that, at the same time, drawn poultry, apparently of the same quality, could be had at the local stores for 20 cents a pound. Shippers will not buy drawn poultry, and farmers are slow to adopt dry plucking methods."

Scott, Sask.—M. J. Tinline, Superintendent, reports:—"December opened with cold, wintry weather, which continued up to the 18th; but since then conditions in this respect have been much more moderate, affording a considerable saving in feed for stock and in fuel for household requirements. There has been more bright sunshine than usual, but the mean temperature of 5.07 is nearly three degrees below the average of the previous nine years. The mild weather caused some of the snow to melt, and, at the end of the month, there is approximately five inches on the ground."

Lacombe, Alberta.—B. C. Milne, Assistant to the Superintendent, reports:—"Cold weather such as was experienced in November characterized the first half of December. Since the 18th, however, it has been mild and bright and the heavy demands on feed and fuel have been greatly lessened. While only three inches of snow fell during the month, there is splendid sleighing and farmers are busy hauling their grain. A large amount of seed grain is being obtained in this district. Prices for feed, both in the shape of grain and roughage, have advanced. All live stock at this station is in splendid shape, particularly the horses, cattle, and sheep that are being wintered outside on a good quality of roughage alone."

Lethbridge, Alberta.—W. H. Fairfield, Superintendent, reports:—"The first half of December was extremely cold, with considerable snow on the ground. The latter part, however, has been mild and a warm 'chinook,' commencing about the 16th, removed most of the snow and left the ground practically bare. This change in the weather certainly came as a welcome relief to owners of live stock in southern Alberta, whose situation during the cold spell, had become very serious, owing to the scarcity of feed."

Invermere, B.C.—R. G. Bewton, Acting Superintendent, reports:—"The first half of December was very cold, the mean temperature for the fifteen days being -6.0. This was followed by a 'chinook' wind, lasting several days, that took away all the snow; since then the weather has been fairly mild up to the 31st. The mean temperature for the month is 12.85. At the Station, there is very little snow on the ground, but, farther up on the benches, there is excellent sleighing. Range stock is in only fair condition, and feed is scarce and prices are high."

Summerland, B.C.—R. H. Helmer, Superintendent, reports:—"December has been very cold. The lowest temperature, -5.0, was recorded on the 12th, and the mercury stayed very close to zero for two weeks, when a mild spell allowed the resumption of ploughing operations, which were continued until after Christmas. The roads have been very good up to date. A great wood shortage has been experienced throughout this Valley, the scarcity of coal resulting in much more wood than usual being used. Live stock is in good condition, and, as there has not been much snow, cattle are still able to get a living on the range."

Agassiz, B.C.—W. H. Hicks, Superintendent, reports:—"The weather during the early part of December was quite cold and windy. The minimum temperature, 8°0, was recorded on the 13th; this is the lowest in any December since 1909. The latter part of the month has been warmer. The precipitation totals 9·63 inches, which is the least for this time since 1914. Live stock in the district generally, is in satisfactory condition, Good prices are being secured for all farm products."

Sidney, Vancouver Island, B.C.—Lionel Stevenson, Superintendent, reports:—"The weather during December has been characterized by more rain, wind and frost than usual. It was unusually cold for four days, the lowest temperature recorded at the Station being 14°0. The water-soaked soil heaved greatly, doing some damage to the young clover. Ploughing ceased on the 6th and has not been resumed. The small acreage in autumn cereals made but little headway. Drainage work and repairing frozen water systems and hauling manure and fuel have occupied much of the time of farmers generally. The live stock of the district has remained in good condition. Coarse feeds are fairly abundant. Poultry products, excepting turkeys, have been plentiful for the Christmas and New Year's markets. Eggs became more plentiful towards the close of the month and prices are lower, Supplies of horticultural products on the farms are not very abundant, and prices are very high. There is no surplus of seed potatoes in this district."

The records of temperature, precipitation and sunshine at the several Experimental Farms and Stations for the month of December are given in the following table:

Meteorological Record for December, 1919.

Experimental Farm or Station at—	Degrees of Temperature F.			Pre- cipitation in inches.	Hours of Sunshine.	
	High- est.	Low- est.	Mean.		Pos- sible.	Actual.
Ottawa, Ont.....	44·0	-16·6	14·40	1·04	272	103·2
Charlottetown, P.E.I.....	55·0	-14·0	19·11	2·60	269	86·1
Kentville, N.S.....	50·0	-11·0	20·80	3·56	274	83·8
Nappan, N.S.....	48·0	-18·0	17·43	2·05	271	98·3
Fredericton, N.B.....	44·0	25·5	11·80	2·34	270	121·6
Ste. Anne de la Pocatière, Que.....	42·5	-26·6	13·30	1·20	264	53·5
Cap Rouge, Que.....	39·0	25·8	9·64	1·59	264	67·4
Lennoxville, Que.....	45·0	-23·0	11·37	1·05	272	98·3
Brandon, Man.....	38·0	-35·0	-5·20	0·50	254	114·9
Indian Head, Sask.....	40·0	34·0	3·48	0·40	248	50·5
Rosthern, Sask.....	39·7	-36·1	1·62	0·20	233	108·0
Scott, Sask.....	40·0	31·7	5·07	0·42	238	102·6
Lacombe, Alberta.....	49·8	-38·6	12·90	0·31	238	97·4
Lethbridge, Alberta.....	55·0	-38·0	18·23	0·55	254	96·1
Invermere, B.C.....	45·0	-34·0	12·85	1·02	251	71·4
Summerland, B.C.....	51·0	- 5·0	23·95	0·17	253	61·6
Agassiz, B.C.....	54·0	8·0	34·65	9·63	256	75·4
Sidney, Vancouver I., B.C.....	52·0	14·0	33·00	4·75	259	68·4

ONTARIO CROP REPORT.

The Ontario Department of Agriculture reports (January 19) that fall wheat at present is well protected by snow, and so far has suffered but little from the winter. Cattle are generally in good condition, notwithstanding the comparatively cold weather, and the rather limited quantity of grain on hand. The good supply of ensilage on hand is credited with helping out the situation more than anything else. While marketing in most quarters is rather slow, Grey reports weekly shipments of well finished cattle. The milk supply is about normal for the season. Many horses are being carried over a little leaner than usual. Very little grain is being marketed. Hay is being disposed of at from \$20 to \$28 a ton in the more settled parts of the province, and from \$30 to \$35 in Port Arthur district. In western Ontario straw is bringing \$10 a ton.

FIXATION OF WHEAT AND FLOUR PRICES IN CANADA.

Under Regulation 70 issued by the Canadian Wheat Board on December 27, 1919, it is ordered that until further notice the price of wheat to mills in Canada be fixed as follows:

Grade.	Price.	Basis in store.
	\$ c.	
British Columbia No. 1.....	2 25½	Canadian Government Elevator, Vancouver.
No. 1 Manitoba Northern.....	2 80	Public Terminal Elevators, Fort William and Port Arthur.
No. 1 Alberta Red Winter.....	2 80	" " "
No. 1 Durum.....	2 70	" " "
Ontario and Quebec—		
No. 1 Spring.....	2 33	Montreal.
No. 1 White Winter.....	2 33	"
No. 1 Red Winter.....	2 33	"
No. 1 Mixed Winter.....	2 31	"
No. 1 Goose.....	2 27	"
No. 1 Commercial Grade.....	2 24	"

The price includes 5 cents per bushel for carrying charges. The spreads for lower grades than those specified above shall be the same as the spreads in the orders of the Board relating to cash payments to be paid to the producer.

Under Regulation 78 of the Canadian Wheat Board it is ordered that the standard of flour manufactured in Canada for sale in Canada be the standard set by the Canadian Wheat Board and designated as (a) Government Standard Spring Wheat Flour and (b) Government Standard Winter Wheat Flour, and the maximum wholesale price of flour from midnight, December 27, 1919, inclusive, basis F.O.B. cars at the points designated herein, until further notice, shall be:

Prices per barrel basis 98 lb. net. jute bags—

	Government Standard Spring Wheat Flour.	Feed Flour.
	\$ c.	\$ c.
Ontario, West of and including Fort William, Port Arthur and Armstrong	12 65	7 00
Manitoba points.....	12 65	7 00
Hudson Bay Jet. to The Pas.....	12 75	7 10
Saskatchewan Points.....	12 55	6 90
Alberta Points, Edmonton, Canmore and East Crow's Nest Station and points East.....	12 45	6 80
Alberta Points West of Canmore.....		
Alberta Points North and West of Edmonton on C.N.R. and G.T.P....	12 55	6 90
Points on A.G.W., Ed. and B.C. Rly.....		
Central Canada Rly.....		
Add freight arbitraries from Edmonton over Edmonton basis.....		
British Columbia Points:		
West of Crow's Nest to Kootenay Landing, Waldo, Kimberly, Marys- ville, Golden and Kootenay Central Points.....	12 65	7 00
Revelstoke, Nelson and Common Points including Trail and Rossland	12 75	7 10
B.C. Coast, Vancouver, Boundary and Okanagan Points and Kettle Valley.....	12 85	7 20
Victoria.....	12 90	7 25
Other Vancouver Island Points add additional freight rate over		
Vancouver, G.T.P. Points West of Edson to Jasper.....	12 95	7 30
Prince Rupert and Points East to Yellowhead.....	13 05	7 40

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Board of Agriculture reported (January 1) that the weather of December was everywhere mild and wet, with the result that little progress with the further seeding of the land could, as a rule, be made. But as the preceding months had been favourable to cultivation, work is practically everywhere forward for the time of year. The young crops, where showing, are generally satisfactory, with the exception of some wheat on low-lying land, which has suffered a little from the wet. As compared with the same period a year ago, it is estimated that the area at present sown with wheat is slightly smaller; while it is reckoned that one-fifth of the ultimate wheat area yet remains to be seeded. In nearly all districts many fields of seeds are patchy and thin, but reports of even and promising plants are more common, and on the whole the position is fairly satisfactory, an improvement being very generally reported. Turnips and swedes, though a small crop, are generally sound and of good quality. The condition of ewes is fairly satisfactory; and lambing prospects in the earliest districts are regarded as favourable. Owing to the scarcity of winter keep, especially hay and roots, stock are being fed more sparingly than usual, and in many districts are somewhat lean in consequence. Many cattle are still out at grass. Unskilled labour is generally sufficient, but skilled men on the other hand are scarce in all districts.

FARM ANIMALS IN THE UNITED STATES, 1919-20.

The Crop Reporting Board of the United States Department of Agriculture issued (January 31) the following estimates of the numbers and values of live stock on farms and ranges of the United States on January 1, 1920, as compared with the revised figures for January 1, 1919.

Farm animals.	1919.	1920.	1919.	1920.	1919.	1920.
	No.	No.	\$ per head.	\$ per head.	\$	\$
Horses.....	21,482,000	21,109,000	98.45	94.39	2,114,897,000	1,992,542,000
Mules.....	4,954,000	4,995,000	135.83	147.10	672,922,000	734,779,000
Milch cows.....	23,475,000	23,747,000	78.20	85.13	1,835,770,000	2,021,681,000
Other cattle.....	45,085,000	44,385,000	44.22	43.14	1,993,442,000	1,914,575,000
Sheep.....	48,866,000	48,615,000	11.63	10.52	568,265,000	511,654,000
Swine.....	74,584,000	72,909,000	22.02	19.01	1,642,598,000	1,386,212,000

The number of animals not on farms, i.e., in cities and villages, is not estimated yearly, but their number in 1910, as reported by the Census was: Horses 3,183,000; mules 270,000; cattle 1,879,000; sheep 391,000; swine 1,288,000. The following changes in farm animals, compared with January 1, 1919, are indicated. In total value horses decreased \$122,355,000; mules increased \$61,857,000; milch cows increased \$185,911,000; other cattle decreased \$78,867,000; sheep decreased \$56,611,000; and swine decreased \$256,386,000. The total value on January 1, 1920, of all animals enumerated above was \$8,561,443,000, as compared with \$8,827,894,000 on January 1, 1919, a decrease of \$266,451,000, or 3.0 p.c.

THE WEATHER DURING DECEMBER.

The Dominion Meteorological Office reports that the temperature was below the average throughout the Dominion, and in nearly all localities to a very marked extent, making one of the coldest Decembers on record over the greater portion of the country. Some of the chief negative departures were 10° at Kamloops, 9° at Edmonton and 12° at White River. The precipitation in British Columbia was below the average in some districts and above in others. In the western provinces it did not differ much from the average, being slightly below in some localities and slightly above in others. In Ontario, Quebec and the Maritime Provinces it was everywhere below the average, and in most places to a considerable amount. At the close of the year, Cariboo in British Columbia reported 18 inches of snow on the ground; the western provinces from 2 to 17 inches, except in southern Alberta and southwestern Saskatchewan, where there was none. In Ontario it varied from a trace in some southern localities to a considerable depth in several of the more northern parts, Cochrane recording as much as 36 inches, and White River 24 inches. In Quebec there was from 5 to about 10 inches, and in the Maritime Provinces from a trace to 10 inches.

PRICES OF AGRICULTURAL PRODUCE, 1919.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1919.

(Furnished by the Board of Grain Commissioners for Canada, for Fort William, Ontario)

Grain and grade.	Dec. 6.		Dec. 13.		Dec. 20.		Dec. 27.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
No. 1 Hard.....	2 15		2 15		2 15	—	2 15	—
No. 1 Northern.....	2 15	—	2 15	—	2 15	—	2 15	—
No. 2 “.....	2 12	—	2 12	—	2 12	—	2 12	—
No. 3 “.....	2 08	—	2 08	—	2 08	—	2 08	—
No. 4 Special.....	2 02	—	2 02	—	2 02	—	2 02	—
No. 5 “.....	1 91	—	1 91	—	1 91	—	1 91	—
No. 6 “.....	1 81	—	1 81	—	1 81	—	1 81	—
Feed.....	1 71	—	1 71	—	1 71	—	1 71	—
Oats—								
No. 2 C.W.....	0 85½—0 89		0 87½—0 88½		0 88½—0 92½		0 90½—0 93	
No. 3 C.W.....	0 83—0 87		0 83½—0 85½		0 85½—0 89½		0 86½—0 89¾	
No. 1 Feed Ex.....	0 83—0 84		0 83½—0 85½		0 85½—0 90		0 87—0 90	
No. 1 Feed.....	0 80½—0 82		0 81½—0 84½		0 86½—0 89		0 84½—0 88¾	
No. 2 Feed.....	0 79—0 80		0 78½—0 80½		0 80½—0 84½		0 81½—0 84¾	
Barley—								
No. 3 C.W.....	1 47½—1 53		1 48½—1 57		1 55½—1 64½		1 65—1 71	
No. 4 C.W.....	1 32—1 35		1 42½—1 44½		1 47½—1 59½		1 60—1 66	
Rejected.....	1 22½—1 30		1 25½—1 31½		1 30—1 34½		1 27½—1 36½	
Feed.....	1 22½—1 30		1 25½—1 31½		1 30—1 33½		1 27½—1 35½	
Flax—								
No. 1 N.W.C.....	4 89—5 26½		4 97—5 18		4 96—5 17		4 69—4 91½	
No. 2 C.W.....	4 83—5 19½		4 92—5 11		4 92—5 12		4 65—4 87½	
No. 3 C.W.....	4 62—4 83½		4 56—4 75		4 56—4 76		4 29—4 51½	

II. Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1919.

(From the Monthly Crop Report of the United States Department of Agriculture.)

Grade and Market.	September.		October.		November.		December.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red Winter, No. 2—								
St. Louis.....	2 21	—2 25	2 21	—2 29	2 24	—2 41	2 40	—2 56
Chicago.....	2 23	—2 27	2 23	—2 27½	2 24	—2 37½	2 38½	—2 47
New York (f. o. b. affloat).....	2 38	—	2 38	—	2 38	—	2 75	—2 80
Corn, No. 2, mixed—								
St. Louis.....	2 21	—2 47	1 39	—1 49	1 44	—1 64	1 50	—1 55
Corn No. 2—								
Chicago.....	1 33	—1 83	1 37	—1 53	1 37	—1 66	1 42	—1 60
Oats, No. 2—								
St. Louis.....	0 64	—0 71	0 67	—0 72	0 70	—0 77	0 78	—0 86½
Chicago.....	0 65½—0 74½		0 70½—0 74½		0 71½—0 80		0 75	—0 85½
Rye No. 2—								
Chicago.....	1 43	—	1 32½—1 42½		1 33½—1 50½		1 50	—1 82

III. Prices of Imported Grain and Flour at British Markets, 1919.

Grain and grade.	Dec. 1.		Dec. 8.		Dec. 15.		Dec. 22.		Dec. 29.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—										
Canadian No. 1.....	2 29½	—	2 29½	—	2 29½	—	2 29½	—	2 29½	—
Canadian No. 2.....	2 26½	—	2 29½	—	2 29½	—	2 29½	—	2 29½	—
American spring.....	2 26½	—	2 26½	—	2 26½	—	2 26½	—	2 26½	—
American hard winter...	2 29½	—	2 29½	—	2 29½	—	2 29½	—	2 29½	—
American red winter...	2 23½	—	2 23½	—	2 23½	—	2 23½	—	2 23½	—
Denmark.....	2 23½	—	2 23½	—	2 23½	—	2 23½	—	2 23½	—
Australian.....	2 32½	—	2 32½	—	2 32½	—	2 32½	—	2 32½	—
Argentine.....	2 26½	—	1 26½	—	2 26½	—	2 26½	—	2 26½	—
Oats—										
Canadian.....	1 39½—1 50		1 39½—1 50		1 39½—1 50		1 57½—1 60½		1 57½—1 60½	
American.....	1 37 —1 47½		1 37 —1 47½		1 37 —1 47½		1 34½—1 37		1 34½—1 37	
Chilian.....	1 55½—1 57½		1 55½—1 57½		1 55½—1 57½		1 55½—1 57½		1 55½—1 57½	
Flour—										
Canadian spring.....	11 25—	—	11 25	—	11 25	—	11 25	—	11 25	—
American.....	11 25	—	11 25	—	11 25	—	11 25	—	11 25	—
Chilian.....	11 25	—	11 25	—	11 25	—	11 25	—	11 25	—
Australian.....	11 25	—	11 25	—	11 25	—	11 25	—	11 25	—

LIVERPOOL.

—	Dec. 2.		Dec. 9.		Dec. 16.		Dec. 23.		Dec. 30.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—										
Nor. Man. No. 1.....	1 92½	—	1 92½	—	1 92½	—	1 92½	—	1 92½	—
Red Winter No. 1.....	1 19½	—	1 89½	—	1 89½	—	1 89½	—	1 89½	—
Hard winter No. 1.....	1 92½	—	1 92½	—	1 92½	—	1 92½	—	1 92½	—
Australian.....	1 94½	—	1 94½	—	1 94½	—	1 94½	—	1 94½	—

IV. Average Prices of British-grown Grain, 1919.

(From the "London Gazette" as published pursuant to s. 8 of the Corn Returns Act, 1882.)

Week ended.	Wheat.		Barley.		Oats.	
	per quarter	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
December 6.....	72 7	2·208	108 11	3·180	55 10	1·480
" 13.....	72 6	2·205	105 2	3·071	56 9	1·503
" 20.....	72 6	2·205	103 6	3·022	56 3	1·490
" 27.....	72 6	2·205	105 10	3·092	57 2	1·515
Average.....	72 6	2·206	105 10	3·092	56 6	1·497

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1920

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DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. EDITOR: ERNEST H. GODFREY, F.S.S.
DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

AGRICULTURAL VALUES IN CANADA, 1919.

Compiled from returns of Crop Correspondents, February 7, 1920.

The Dominion Bureau of Statistics has published its annual report on the average values for the year 1919, consisting of estimates of (1) the values of farm lands; (2) the wages for farm help; and (3) the value of farm live stock and of wool. These estimates have been compiled from the returns of a large corps of correspondents throughout every province of the Dominion.

AVERAGE VALUE OF FARM LAND.

The average value of farm land for the Dominion, including improved and unimproved land, together with the value of dwellings and other farm buildings, is placed at \$52 per acre, as compared with \$46 last year; \$44 in 1917; \$41 in 1916; \$40 in 1915; \$38 in 1914 and in 1910. This shows an enhancement in value of farm lands of \$14 or 36.8 per cent in five years. By provinces, the value is highest in British Columbia, being \$174 as compared with an estimate unit value of \$149 per acre in 1917 and 1918. Ontario, with an estimated average value of \$66 per acre, and Quebec with \$72 per acre are above the average for the Dominion. Last year both Ontario and Quebec gave each the average value of farm lands at \$57 per acre. In Prince Edward Island the average value of farm lands has risen from \$44 per acre, the highest previous value, to \$51. Nova Scotia also shows an increase from \$36 per acre in 1918 to \$41 in 1919. New Brunswick valued its farm land at \$19 per acre in 1910, \$29 in 1916 and 1917, \$35 in 1918 and \$32 in 1919. The value of farm lands in Manitoba, while fluctuating between \$29 in 1910 and \$32 in 1918, rose to \$35 per acre in 1919. In Saskatchewan farm lands were valued at \$32 as compared with \$29 per acre in 1918 and \$24 in 1914, and Alberta lands increased in value from \$21 per acre in 1914 to \$27 in 1917 and \$29 in 1919.

AVERAGE WAGES OF FARM HELP.

The average wages paid for farm help in 1919 show considerable increase as compared with the previous year. For Canada as a whole, the wages per month during summer, for males, inclusive of board, is \$78 and for females, \$43 per month; the value of board, \$24 per month for males and \$19 for females, is included in the above estimate. In 1918, the cost of farm help during summer months was estimated, for males, at \$70, including \$21 per month for board, and for females at \$38 per month, including \$17 per month for board. By the year,

including board, males received \$764 in 1919 as compared with \$617 in 1918 and \$323 in 1914; females received \$465 in 1919, as compared with \$416 in 1918 and \$189 in 1914, being an annual average increase of over 136 per cent for men and of 146 per cent for women from 1914 to 1919. Compared by provinces, the average wages per month for male and female help respectively, in the summer season, including board, were in order of value in 1919 as follows: British Columbia, \$96 and \$64, Alberta, \$95 and \$58, Saskatchewan, \$94 and \$55, Manitoba, \$89 and \$52, New Brunswick, \$79 and \$35, Quebec, \$76 and \$37, Ontario, \$70 and \$40, Nova Scotia, \$69 and \$34, and Prince Edward Island \$51 and \$28. In 1918 the position of the provinces as regards wages of males was the same, British Columbia coming first for both males and females and Prince Edward Island last in both cases. The net earnings of farm help in the summer months for females was highest in British Columbia, \$37, followed by Alberta with \$34, Saskatchewan and Manitoba, \$32, Ontario and Quebec, \$22, New Brunswick, \$20, Nova Scotia, \$18 and Prince Edward Island \$15, while for males it was highest in Alberta with \$57 per month, Saskatchewan \$66, followed by British Columbia, \$65, Manitoba, \$63, New Brunswick, \$56, Quebec \$53, Ontario \$48, Nova Scotia \$47 and Prince Edward Island \$33 per month.

VALUES OF FARM LIVE STOCK AND OF WOOL.

The downward trend of the value of horses from the high mark of 1917 is again in evidence in the figures of 1919; the values of milch cows continues to advance while the value of other horned cattle, sheep and swine, is either stationary or slightly lower. For the Dominion as a whole, the average price of horses under 1 year old is \$55 as against \$56 in 1918 and \$57 in 1917; for horses 1 year old to under 3, the average value per animal was \$108 as against \$112 in 1918 and \$116 in the previous year; for work horses the price per animal is practically the same in 1919 as in 1918 (\$161 and \$162). The continued upward trend of the value of milk products is reflected in the average price of milch cows which is placed at \$92 per head in 1919 as compared with \$87 in 1918, \$62 in 1915 and \$42 in 1910. The average value of other cattle under 1 year was \$25 as compared with a similar figure in 1918, while those of three years old and over dropped in value from \$88 per head in 1918 to \$83 per head in 1919. Sheep average \$15 as against \$16 in 1918. Swine are valued at \$26 as against \$25 in 1918. Wool shows a drop of from 62 cents per pound to 55 cents for unwashed, and from 80 cents to 70 cents for washed. Correspondents were required to report from the best possible information available the average value per head of each kind of farm animal in their district, and the averages thus obtained have been compiled and employed in the calculations of total values according to the number of farm animals as returned in June 1919. The resulting totals for the Dominion are as follows, the figures for 1918 being given in brackets: Horses, \$435,070,000 (\$459,155,000); milch cows,

\$327,814,000 (\$307,244,000); other cattle, \$381,007,000 (\$398,814,-000); all cattle, \$708,821,000 (\$706,058,000); sheep, \$50,402,000 (\$48,802,000); swine, \$102,309,000 (\$112,751,000). The total value for farm live stock in Canada is therefore estimated at \$1,296,602,000 as against \$1,326,766,000 in 1918 and \$1,102,261,000 in 1917.

The total number of animals reported on farms in June last was: Horses 3,667,369, milch cows 3,548,437, other cattle 6,536,574, sheep 3,421,958 and Swine 4,040,070.

I. Average Values per acre of Occupied Farm Lands in Canada, as estimated by Crop Correspondents, 1908-10, 1914-19.

Provinces.	1908.	1909.	1910.	1914.	1915.	1916.	1917.	1918.	1919.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Canada.....	36	39	38	38	40	41	44	46	52
Prince Edward Island.....	34	32	31	39	38	39	44	44	51
Nova Scotia.....	25	31	25	28	28	34	34	36	41
New Brunswick.....	21	24	19	26	22	29	29	35	32
Quebec.....	42	43	43	47	51	52	53	57	72
Ontario.....	47	50	48	54	52	53	55	57	66
Manitoba.....	27	29	29	32	30	32	31	32	35
Saskatchewan.....	20	22	22	24	24	23	26	29	32
Alberta.....	18	20	24	21	23	22	27	28	29
British Columbia.....	76	73	74	150	125	119	149	149	174

II. Average Wages of Farm Help in Canada, as estimated by Crop Correspondents, 1909-10, 1914-19.

Provinces.	Per month in summer season, including board.		Per year, including board.		Average value on board per month.	
	Males.	Females.	Males.	Females.	Males.	Females.
	\$	\$	\$	\$	\$	\$
Canada.....1909	34	19	336	206	10	8
1910	35	21	348	210	12	10
1914	36	19	323	189	14	11
1915	37	20	341	200	15	11
1916	43	22	397	228	17	13
1917	64	34	611	364	19	15
1918	70	38	617	416	21	17
1919	78	43	764	465	24	19
P. E. Island.....1909	25	14	226	144	8	6
1910	27	15	245	149	10	8
1914	25	13	221	136	10	8
1915	27	15	238	137	10	9
1916	31	18	301	167	13	9
1917	40	23	407	254	14	10
1918	46	25	469	289	15	11
1919	51	28	504	318	18	13
Nova Scotia.....1909	31	15	311	165	10	7
1910	34	17	321	176	12	8
1914	31	15	301	155	11	8
1915	33	16	310	169	12	8
1916	39	19	365	195	16	11
1917	54	26	543	296	17	12
1918	60	30	590	326	19	14
1919	69	34	628	346	22	16

II. Average Wages of Farm Help in Canada, as estimated by Crop Correspondents, 1909-10, 1914-19.

Provinces.	Per month in summer season including board.		Per year including board.		Average value on board per month.	
	Males.	Females.	Males.	Females.	Males.	Females.
	\$	\$	\$,	\$	\$
New Brunswick.....						
1909	33	16	240	172	10	8
1910	34	17	289	152	11	8
1914	32	15	302	165	11	8
1915	34	16	308	153	14	8
1916	36	17	328	164	14	10
1917	57	28	572	306	18	13
1918	69	31	725	335	20	14
1919	79	35	804	401	23	15
Quebec.....						
1909	33	17	331	177	10	8
1910	36	19	313	178	12	8
1914	34	16	296	152	13	9
1915	33	16	301	159	13	10
1916	41	20	371	196	16	11
1917	59	29	523	287	17	12
1918	65	33	575	317	20	13
1919	76	37	695	372	23	15
Ontario.....						
1909	32	18	332	203	10	8
1910	31	20	336	211	12	10
1914	32	17	297	172	13	10
1915	31	17	304	179	13	11
1916	39	32	360	206	16	13
1917	59	32	561	344	18	14
1918	62	35	425	382	20	16
1919	70	40	691	431	22	18
Manitoba.....						
1909	36	24	366	262	11	9
1910	40	25	400	282	15	11
1914	39	22	364	226	15	13
1915	45	27	390	245	15	13
1916	48	27	454	283	18	15
1917	68	40	689	452	21	17
1918	78	45	791	494	23	19
1919	89	52	889	557	26	20
Saskatchewan.....						
1909	38	24	390	264	16	10
1910	40	25	403	264	14	13
1914	41	23	366	235	17	14
1915	42	24	386	241	17	14
1916	49	26	434	278	18	15
1917	73	41	734	470	23	18
1918	86	49	849	545	25	20
1919	94	55	912	598	28	23
Alberta.....						
1909	40	26	422	285	15	12
1910	40	28	416	300	17	14
1914	40	24	365	236	16	14
1915	44	24	404	253	17	14
1916	52	29	501	299	20	16
1917	76	44	784	476	23	19
1918	86	50	863	569	26	22
1919	95	58	976	648	28	24
British Columbia.....						
1909	46	25	428	265	15	10
1910	57	38	-	-	20	17
1914	48	31	460	324	21	18
1915	49	31	463	287	19	16
1916	50	29	543	325	22	18
1917	78	48	803	481	25	21
1918	89	57	903	589	28	23
1919	96	64	1065	715	31	27

III. Average Values of Farm Animals and of Wool, as estimated by Crop Correspondents, 1909-10, 1914-19.

Provinces.	Horses.			Milch cows	Other horned cattle.			Swine per 100 lb. live weight	Sheep.	Wool per lb.		
	Under 1 year	1 year to under 3 years	3 years and over		Under 1 year	1 year to under 3 years	3 years and over			Un-washed	Washed	
		\$	\$			\$	\$					\$
Canada.....	1909	49	106	150	36	10	23	33	8 00	6 00	0 17	0 24
	1910	54	119	171	42	12	26	39	8 00	6 00	0 18	0 24
	1914	55	114	165	57	16	37	54	7 00	7 00	0 19	0 26
	1915	54	111	160	62	17	38	55	9 00	8 00	0 28	0 38
	1916	54	109	160	70	20	43	63	12 00	10 00	0 37	0 50
	1917	57	116	167	84	24	52	77	17 00	15 00	0 59	0 75
	1918	56	112	162	87	25	57	88	16 00	16 00	0 62	0 80
	1919	55	108	161	92	25	56	83	16 00	15 00	0 55	0 70
P. E. Island.....	1909	34	87	126	31	8	19	28	7 00	5 00	0 16	0 22
	1910	44	102	140	32	8	19	28	7 00	6 00	0 17	0 24
	1914	46	95	143	39	11	23	35	7 00	6 00	0 21	0 27
	1915	42	92	136	42	11	25	37	8 00	7 00	0 32	0 40
	1916	37	76	112	52	14	31	46	12 00	9 00	0 37	0 47
	1917	41	79	118	63	17	37	54	17 00	14 00	0 60	0 76
	1918	43	86	131	71	17	38	60	16 00	15 00	0 65	0 83
	1919	53	97	146	83	20	48	72	16 00	14 00	0 46	0 59
Nova Scotia.....	1909	40	90	133	33	9	23	37	7 00	4 00	0 19	0 24
	1910	46	95	145	37	9	24	40	7 00	4 00	0 20	0 25
	1914	53	116	166	40	10	25	42	8 00	5 00	0 21	0 26
	1915	53	108	167	45	11	28	44	8 00	5 00	0 31	0 40
	1916	50	99	150	53	13	33	54	11 00	7 00	0 39	0 49
	1917	49	101	149	63	18	41	63	17 00	9 00	0 61	0 74
	1918	51	100	152	65	15	40	62	17 00	10 00	0 71	0 88
	1919	55	109	167	76	17	46	75	18 00	11 00	0 62	0 76
New Brunswick...	1909	40	90	137	29	8	17	28	7 00	4 00	0 18	0 24
	1910	50	112	157	33	8	19	31	7 00	5 00	0 18	0 23
	1914	54	123	183	40	11	24	39	8 00	5 00	0 22	0 28
	1915	59	127	182	40	11	25	37	8 00	5 00	0 30	0 40
	1916	55	113	169	48	13	28	44	12 00	6 00	0 36	0 48
	1917	54	118	165	63	16	37	55	16 00	10 00	0 59	0 74
	1918	60	125	175	65	18	38	58	17 00	12 00	0 71	0 89
	1919	62	125	204	70	17	41	58	17 00	11 00	0 57	0 73
Quebec.....	1909	41	98	145	33	8	19	29	10 00	5 00	0 21	0 29
	1910	46	103	155	39	9	21	32	9 00	6 00	0 21	0 29
	1914	49	107	164	47	11	27	41	9 00	7 00	0 23	0 30
	1915	48	104	159	51	12	28	42	10 00	7 00	0 33	0 43
	1916	49	105	155	62	16	35	52	14 00	11 00	0 44	0 58
	1917	53	117	171	81	19	43	67	20 00	15 00	0 65	0 83
	1918	53	114	171	79	18	40	62	17 00	14 00	0 63	0 83
	1919	55	120	179	84	19	42	64	17 00	13 00	0 57	0 76
Ontario.....	1909	53	110	144	40	12	26	38	7 00	7 00	0 14	0 20
	1910	60	127	174	48	14	31	46	7 00	7 00	0 14	0 20
	1914	54	111	152	64	20	43	62	8 00	9 00	0 19	0 25
	1915	51	102	142	70	20	45	64	9 00	10 00	0 26	0 33
	1916	52	105	151	76	23	51	71	12 00	13 00	0 34	0 44
	1917	55	105	147	92	29	63	90	17 00	18 00	0 55	0 66
	1918	54	105	146	96	29	65	94	17 00	20 00	0 61	0 76
	1919	53	101	144	107	29	64	95	17 00	18 00	0 54	0 67
Manitoba.....	1909	63	132	187	34	10	21	30	7 00	7 00	0 09	0 14
	1910	68	146	207	40	11	24	36	7 00	7 00	0 10	0 13
	1914	61	126	176	62	17	38	56	6 00	9 00	0 14	0 18
	1915	63	124	178	65	18	41	60	8 00	9 00	0 21	0 29
	1916	61	123	171	74	21	47	67	11 00	12 00	0 31	0 37
	1917	63	127	178	88	27	55	83	16 00	16 00	0 51	0 55
	1918	65	126	182	91	28	65	93	16 00	17 00	0 56	0 67
	1919	59	117	172	90	26	59	85	16 00	15 00	0 54	0 61

III. Average Values of Farm Animals and of Wool, as estimated by Crop Correspondents, 1909-19

1914-19.—Concluded.

Provinces.		Horses.			Milch cows.	Other horned cattle.			Swine per 100 lb. live weight	Sheep.	Wool per lb.	
		Under 1 year	1 year to under 3 years	3 years and over		Under 1 year	1 year to under 3 years	3 years and over			Un-washed	Washed
		\$	\$	\$	\$	\$	\$	\$	\$ c.	\$ c.	\$ c.	\$ c.
Saskatchewan.....	1909	56	123	180	38	11	25	40	7 00	10 00	0 10	0 13
	1910	50	137	200	41	12	27	40	8 00	7 00	0 09	0 14
	1914	63	133	187	66	18	41	61	6 00	7 00	0 15	0 20
	1915	64	132	150	69	20	44	62	8 00	8 00	0 20	0 24
	1916	65	133	188	73	22	47	67	10 00	10 00	0 28	0 33
	1917	69	137	194	85	27	58	83	15 00	14 00	0 50	0 54
	1918	64	134	190	91	30	64	92	15 00	17 00	0 56	0 71
	1919	56	108	162	91	27	60	86	16 00	15 00	0 51	0 62
Alberta.....	1909	47	97	150	35	11	23	33	7 00	7 00	0 12	0 18
	1910	51	108	164	39	12	25	38	8 00	6 00	0 11	0 18
	1914	45	91	137	66	21	42	61	6 00	7 00	0 14	0 18
	1915	47	97	142	69	22	45	64	8 00	8 00	0 23	0 25
	1916	51	102	151	77	27	51	73	11 00	10 00	0 28	0 37
	1917	55	109	161	89	33	62	87	16 00	15 00	0 51	0 55
	1918	48	96	142	93	32	64	95	15 00	15 00	0 57	0 69
	1919	40	82	125	89	26	57	83	16 00	14 00	0 52	0 64
British Columbia..	1909	44	111	165	51	12	26	38	8 00	7 00	0 10	0 15
	1910	63	144	225	57	13	28	43	—	—	0 10	0 15
	1914	46	93	162	89	22	48	73	8 00	8 00	0 15	0 16
	1915	42	93	136	91	21	48	67	9 00	8 00	0 19	0 20
	1916	48	87	144	90	24	48	72	13 00	11 00	0 29	0 45
	1917	50	101	155	103	29	62	89	17 00	14 00	0 46	0 52
	1918	52	98	150	106	29	65	93	15 00	15 00	0 54	0 64
	1919	63	110	167	118	35	70	102	19 00	16 00	0 49	0 58

IV. Numbers in June and Values in December of Farm Live Stock in Canada, as estimated by Crop Correspondents, 1918 and 1919.

Farm Animals.	1918	1919	1918	1919	1918	1919
	No.	No.	\$ per head	\$ per head	\$	\$
Canada—						
Horses.....	3,609,257	3,667,369	127	119	459,155,000	435,070,000
Milch cows.....	3,538,600	3,548,437	87	92	307,244,000	327,814,000
Other cattle.....	6,507,267	6,536,574	61	58	398,814,000	381,007,000
Total cattle.....	10,045,867	10,085,011	70	70	706,058,000	708,821,000
Sheep.....	3,052,748	3,421,958	16	15	48,802,000	50,402,000
Swine.....	4,289,682	4,040,070	26	25	112,751,000	102,309,000
P.E. Island—						
Horses.....	32,620	34,576	103	114	3,353,000	3,935,000
Milch cows.....	41,429	45,662	71	83	2,922,000	3,794,000
Other cattle.....	69,092	79,815	44	53	3,008,000	4,230,000
Total cattle.....	110,521	125,477	54	64	5,930,000	8,024,000
Sheep.....	73,046	114,955	15	14	1,081,000	1,603,000
Swine.....	40,814	49,510	29	27	1,183,000	1,320,000
Nova Scotia—						
Horses.....	70,101	69,589	117	127	8,194,000	8,838,000
Milch cows.....	157,829	162,230	65	76	10,337,000	12,329,000
Other cattle.....	249,422	243,831	44	54	11,046,000	13,167,000
Total cattle.....	407,251	406,061	53	55	21,383,000	25,496,000
Sheep.....	259,847	261,529	10	11	2,626,000	2,877,000
Swine.....	68,233	69,982	30	29	2,020,000	2,029,000

IV. Numbers in June and Values in December of Farm Live Stock in Canada, as estimated by Crop Correspondents, 1918 and 1919—Concluded.

Farm Animals.	1918	1919	1918	1919	1918	1919
			\$ per head	\$ per head	\$	\$
New Brunswick—						
Horses.....	66,590	77,828	141	138	9,385,000	10,776,000
Milch cows.....	120,123	153,058	65	70	7,810,000	10,640,000
Other cattle.....	166,624	211,964	41	42	6,770,000	8,870,000
Total cattle.....	286,747	365,022	51	53	14,580,000	19,510,000
Sheep.....	140,015	212,745	12	11	1,642,000	2,449,000
Swine.....	79,814	104,939	28	31	2,219,000	3,291,000
Quebec—						
Horses.....	496,811	463,902	131	134	65,082,000	62,163,000
Milch cows.....	1,163,865	1,056,347	79	84	91,945,000	88,734,000
Other cattle.....	1,245,819	1,213,297	45	44	56,062,000	50,385,000
Total cattle.....	2,409,684	2,269,644	61	61	148,007,000	139,119,000
Sheep.....	959,070	1,007,425	14	13	13,427,000	13,097,000
Swine.....	997,255	935,425	26	24	25,929,000	22,450,000
Ontario—						
Horses.....	732,977	719,569	111	110	81,169,000	79,153,000
Milch cows.....	1,097,039	1,141,016	96	107	105,515,000	121,623,000
Other cattle.....	1,770,683	1,786,175	67	68	118,765,000	121,272,000
Total cattle.....	2,867,722	2,927,191	78	83	224,280,000	242,895,000
Sheep.....	972,341	1,101,740	20	18	19,766,000	19,831,000
Swine.....	1,656,386	1,695,487	27	25	43,896,000	42,387,000
Mani obo—						
Horses.....	384,772	379,356	141	131	54,371,000	49,523,000
Milch cows.....	225,659	227,872	91	90	20,622,000	20,609,000
Other cattle.....	521,240	553,899	64	58	33,546,000	32,075,000
Total cattle.....	746,899	781,771	73	67	54,168,000	52,684,000
Sheep.....	136,782	167,170	17	15	2,317,000	2,518,000
Swine.....	284,596	261,542	26	27	7,517,000	7,185,000
Saskatchewan—						
Horses.....	990,009	1,078,452	149	125	147,511,000	139,807,000
Milch cows.....	352,989	374,062	91	91	32,122,000	34,040,000
Other cattle.....	926,342	1,005,501	66	62	61,139,000	62,341,000
Total cattle.....	1,279,331	1,379,563	73	70	93,261,000	96,381,000
Sheep.....	134,177	146,911	17	15	2,281,000	2,204,000
Swine.....	521,240	432,367	28	26	14,595,000	11,242,000
Alberta—						
Horses.....	791,246	800,380	107	94	84,662,000	75,236,000
Milch cows.....	328,702	336,596	93	89	30,569,000	29,957,000
Other cattle.....	1,362,880	1,247,448	70	60	95,402,000	74,847,000
Total cattle.....	1,691,582	1,584,044	74	66	125,971,000	104,804,000
Sheep.....	332,179	364,498	15	14	4,983,000	5,103,000
Swine.....	601,534	445,858	24	25	14,437,000	11,146,000
British Columbia—						
Horses.....	44,131	43,717	123	129	5,428,000	5,639,000
Milch cows.....	50,965	51,594	106	118	5,402,000	6,088,000
Other cattle.....	195,165	194,644	67	71	13,076,000	13,820,000
Total cattle.....	246,130	246,238	75	81	18,478,000	19,908,000
Sheep.....	45,291	44,985	15	16	679,000	720,000
Swine.....	39,805	44,960	24	28	955,000	1,259,000

V. Estimated Total Values of Farm Live Stock in Canada, by Provinces, 1914-1919.

Province and Year.	Horses.	Cattle.	Sheep.	Swine.	Total.
	\$	\$	\$	\$	\$
Canada—					
1914	371,430,363	297,130,793	14,550,710	42,418,325	725,530,191
1915	373,381,000	316,380,000	16,226,000	43,653,000	749,640,000
1916	380,884,000	360,874,000	20,312,000	49,477,000	811,547,000
1917	429,123,000	544,676,000	35,576,000	92,886,000	1,102,261,000
1918	459,155,000	706,058,000	48,802,000	112,751,000	1,326,766,000
1919	435,070,000	708,821,000	50,402,000	102,309,000	1,296,602,000

V. Estimated Total Values of Farm Live Stock in Canada, by Provinces, 1914-1919
—Concluded.

Province and Year.	Horses.	Cattle.	Sheep.	Swine.	Total.
Prince Edward Island—	\$	\$	\$	\$	\$
1914	4,013,710	3,405,125	516,274	614,923	8,550,132
1915	3,911,000	3,588,000	606,000	510,000	8,615,000
1916	3,355,000	4,369,000	799,000	766,000	9,289,000
1917	3,408,000	4,998,000	1,245,000	947,000	10,598,000
1918	3,353,000	5,930,000	1,081,000	1,183,000	11,547,000
1919	3,935,000	8,024,000	1,603,000	1,320,000	14,882,000
Nova Scotia—					
1914	7,594,204	9,416,337	996,029	849,877	18,856,447
1915	7,621,000	10,354,000	1,130,000	961,000	20,066,000
1916	6,933,000	12,172,000	1,306,000	935,000	21,346,000
1917	7,141,000	14,391,000	1,809,000	2,626,000	25,967,000
1918	8,194,000	21,383,000	1,433,000	2,020,000	33,030,000
1919	8,838,000	25,496,000	2,877,000	2,029,000	39,240,000
New Brunswick—					
1914	9,060,306	6,763,618	563,652	1,300,052	17,687,628
1915	9,018,000	6,767,000	555,000	1,269,000	17,609,000
1916	8,244,000	7,904,000	689,000	1,202,000	18,039,000
1917	8,244,000	9,848,000	1,039,000	1,853,000	20,984,000
1918	9,385,000	14,580,000	1,642,000	2,219,000	27,826,000
1919	10,776,000	19,510,000	2,449,000	3,291,000	36,026,000
Quebec—					
1914	50,105,892	59,334,657	3,770,494	9,087,028	122,298,071
1915	41,728,000	61,187,000	4,159,000	9,175,000	116,249,000
1916	38,252,000	66,720,000	5,226,000	9,032,000	119,230,000
1917	49,875,000	118,078,000	12,737,000	20,294,000	200,984,000
1918	65,082,000	148,007,000	13,427,000	25,929,000	252,445,000
1919	62,163,000	139,119,000	13,097,000	22,450,000	236,829,000
Ontario—					
1914	105,393,389	113,759,147	5,571,619	19,606,735	244,330,890
1915	108,423,000	119,349,000	6,118,000	20,574,000	254,464,000
1916	112,026,000	140,866,000	7,370,000	25,283,000	285,545,000
1917	100,259,000	154,428,000	11,016,000	31,211,000	296,914,000
1918	81,169,000	224,280,000	19,766,000	43,896,000	369,111,000
1919	79,153,000	242,895,000	19,831,000	42,387,000	384,266,000
Manitoba—					
1914	41,634,302	20,044,976	396,854	2,034,134	64,110,266
1915	42,274,000	21,088,000	432,000	2,368,000	66,162,000
1916	40,754,000	22,313,000	597,000	2,215,000	65,879,000
1917	44,574,000	38,330,000	1,289,000	4,157,000	88,350,000
1918	54,371,000	54,168,000	2,317,000	7,517,000	118,373,000
1919	49,523,000	52,684,000	2,518,000	7,185,000	111,910,000
Saskatchewan—					
1914	90,026,252	34,475,726	892,271	4,396,978	129,791,227
1915	92,619,000	40,699,000	1,066,000	5,347,000	139,731,000
1916	96,025,000	44,214,000	1,384,000	5,686,000	147,309,000
1917	121,482,000	80,329,000	1,822,000	14,492,000	218,125,000
1918	147,511,000	93,261,000	2,281,000	14,595,000	257,648,000
1919	139,807,000	96,381,000	2,204,000	11,242,000	249,634,000
Alberta—					
1914	56,352,310	40,866,739	1,468,567	4,062,568	102,750,184
1915	61,559,000	44,942,000	1,789,000	2,871,000	111,161,000
1916	68,673,000	52,949,000	2,455,000	3,658,000	127,735,000
1917	87,635,000	106,789,000	4,016,000	17,708,000	216,148,000
1918	84,662,000	125,971,000	4,983,000	14,437,000	230,053,000
1919	75,236,000	104,804,000	5,103,000	11,146,000	196,289,000
British Columbia—					
1914	7,249,998	9,064,468	374,850	466,030	17,155,346
1915	6,228,000	8,406,000	371,000	578,000	15,583,000
1916	6,622,000	9,367,000	486,000	700,000	17,174,000
1917	6,505,000	17,485,000	603,000	791,000	25,384,000
1918	5,428,000	18,478,000	679,000	955,000	25,540,000
1919	5,639,000	19,908,000	720,000	1,259,000	27,526,000

REPORTS FROM THE PROVINCES.

Maritime Provinces.—The winter has been extremely cold, but live stock have come through in good condition. The demand for horses is good. Milch cows are in good condition and advancing in price. Although few sheep have been raised in these provinces the industry is growing and farmers report good results.

Quebec.—There is an alarming scarcity of farm labourers. The majority of farmers are obliged to attend to everything themselves, and it is feared that cultivation and production will suffer in consequence. The eight hour on railroad work, in mills and manufactures is the great inducement for men leaving farm work. Help is seldom hired by the year, being needed especially during the seeding, haying and harvesting season. Few women are engaged in farm work, and it is very difficult to get them as domestics. The grain crop, being only medium, there is but a poor supply of feed. Farmers are disposing of young cattle, sheep and swine, in order not to have to purchase food. Animals are in good condition, notwithstanding the very severe weather. There are very few sheep and wool is sold unwashed.

Ontario.—The winter has been long with extremely cold weather. Live stock on the whole have wintered well and are in good condition. The horse market has been remarkably dull this year, and but few horses have changed hands, and then at very low prices. Milch cows are in good demand, and command high prices. There is a poor market for beef cattle. Although feed shortage has been felt throughout the province farmers generally have enough grain to bring their stock through the winter. Hog production is decreasing on account of the high cost of feed. Sheep raising is a very promising industry and farmers are showing considerable interest in it. The question of labour is a critical one. Very little help of any kind is securable and then only at the highest rate of pay.

Manitoba.—Throughout the whole province the winter has been very long and severe. Scarcity of feed has been felt everywhere, and in many instances cattle and horses have died from want of proper nourishment. The market has been dull, and what horses and cattle have changed hands have sold at very low prices. The cost of producing swine is so expensive that many farmers are not raising them this year. Very few sheep are kept in this province. Labour is very hard to obtain at any price, especially during the winter months.

Saskatchewan.—In the southern part of the province horses and cattle were ranging out in good condition. There has been considerable shortage of feed throughout the whole province and in northern Saskatchewan many horses and cattle have died from cold and lack of feed. Horses changing hands are selling at very low prices. Dairy cattle realize good prices, but few sales are being made. Few farmers are raising swine, as the present cost of production is so high. The sheep industry is increasing and profitable prices are being paid for wool.

Alberta.—The feed situation in Alberta is a critical one. Many farmers have had to kill their cattle or sell at low rates, in order to meet feed shortage. Many horses and cattle have died owing to lack of feed and from severe cold. In all probability there will be a scarcity of horses for spring work. Very few farmers are raising swine, as the cost of upkeep is so great. Labour is scarce and costly.

British Columbia.—The demand for horses is very poor, as feed is scarce and dear and farmers selling are realizing but low prices. Dairy cattle are increasing and commanding high prices. Fewer swine are being kept. The sheep industry, although small, is increasing and good prices are being paid for wool. Foreign labour is the only obtainable, and then only by the hour at high wages.

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The temperatures recorded during January have ranged lower than for any month during the past twenty-eight years, which is the period during which the Experimental Farm records have been tabulated. The thermometer has registered below zero on twenty-five days, and only on one occasion did it rise above freezing. The highest temperature recorded during the month is 33.8, the lowest -29.0, and the mean is 1.88; while, a year ago, the maximum was 37.2, the minimum -22.0 and the mean temperature 16.97. The precipitation totals 3.00 inches, made up entirely of snow,—compared with 2.53 inches for the previous January, of which .77 of an inch was rain and the balance snow. The bright sunshine averages 3.58 hours a day, while for the corresponding month a year ago the figures were 2.79 hours.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—“January has been exceptionally cold throughout, the thermometer registering below zero every day from the 19th to the 31st. A number of light flurries of snow have occurred, but no heavy storms or drifting to block the roads. On the 27th, 34.0 was recorded, but scarcely softened the snow; this has been the only approach to a thaw. The extremely cold weather has made it necessary to use rather more feed for the stock than had been anticipated. During “Farmers’ Week” on the Island, the delegates to the various meetings were invited to luncheon in the new office building, which had been completed the previous month. The visitors greatly appreciated the luncheon, and the opportunity afforded them of seeing the live stock and the present equipment of the Charlottetown Station. Owing to the severe weather, the Egg-laying Contest has not produced so many eggs as expected. Thinking that it might be due to the floors being cold, the houses have been banked with snow. However, the birds are healthy, and look strong and vigorous, and should even yet give a good account of themselves.”

Kentville, N.S.—W. S. Blair, Superintendent, reports:—"January has been unusually severe, with a mean temperature of 10·10, compared with an average of 21·28 for the corresponding period from 1915 to 1919. The thermometer registered below zero during fourteen different nights, the lowest being -19·0 on the 26th; while -9·0 was the highest reached during the day on the 31st, this being the first occasion on record at the Station of the temperature remaining below zero all through the day. On only three occasions have there been higher readings than 32. The precipitation totals 2·91 inches, made up of snow—which is much more than usual. The bright sunshine aggregates 59·85 hours, while the average of the five previous years was 77·2. The ground is well covered with snow and it is hoped that fruit trees may escape possible root injury because of the cold weather. There has been good sleighing all through the month."

Nappan, N.S.—W. W. Baird, Superintendent, reports:—"This has been the coldest January in the history of the Farm, with zero or lower recorded on twenty-two days, and with a mean temperature of 7·05 as compared with a January average of 17·82 for the six previous years. The bright sunshine aggregates 92·1 hours, which is about normal. The precipitation totals 1·40 inch, made up of a number of light snowfalls and six inches on the 21st, which resulted in the first sleighing. In spite of the severe weather, the Experimental Farm live stock and poultry have thrived well. The daily gains of the twenty-four fattening steers range around 273 lbs. In the Egg-laying Contest being conducted at the Farm, approximately 100 out of 200 hens entered are laying and during the month these have averaged about 12·5 eggs each. The weather, so far, has been very favourable for lumbering operations in this district."

Fredericton, N.B.—W. W. Hubbard, Superintendent, reports:—"Not a drop of rain has fallen during January, while the snowfall has been unusually light. This, coupled with a lower mean temperature than has been recorded for half a century, has dried up wells and springs to an extent that is causing inconvenience, and, in some cases, actual suffering. It has also been extremely difficult to keep the frost out of cellars and storehouses. Owing to the absence of storms, conditions for general work have been favourable and both on farms and in lumber camps operations are well advanced. Live stock, although suffering somewhat from the cold, is generally healthy. At the Experimental Station, the tuberculin test, for the second time inside of twelve months, showed no re-actors in the herd. The weather has been trying on fruit trees, by reason both of lack of snow and of the extreme steady dry cold. The comparative absence of high winds, however, has been one favourable influence."

Ste. Anne de la Pocatière, Que.—Jos. Begin, Superintendent, reports:—"January has been the coldest month so far recorded at this Station; the thermometer on twenty-six different days registering below zero. The highest temperature recorded is 28·2, the lowest -31·6 and the mean 1·8, compared with extremes of 38·8 and -23·6 and a mean of 12·6 for the corresponding period in 1919.

The precipitation totals only 0.90 of an inch, made up entirely of snow; while a year ago it amounted to 3.10 inches. The bright sunshine averages 2.78 hours a day, being a fraction less than a year ago. High winds from the north and northwest and scarcity of snow, have characterized the month. Almost all of the total of nine inches of snow, which fell on seven different days, has drifted to sheltered spots, and the open fields have been left completely bare. The manure spreader has been easily used during the whole month on all parts of the Station. Wagons and sleighs have been in use in this section during the whole of January. Owing to the absence of snow, the frost has penetrated the ground to a considerable depth, and even under the foundation of buildings, doing much damage to stored potatoes and vegetables in cellars. Farmers will remember the present winter as the most disastrous to tile drains and water pipes."

Cap Rouge, Que.—G. A. Langelier, Superintendent, reports:—"January has been colder, drier and brighter than the average of the corresponding month for the last eight years, the figures being, respectively, 1.93 and 9.38 for mean temperature, 3.50 and 4.26 inches for precipitation, and 71.1 and 53.5 hours for sunshine. The main characteristic of the weather has been the extreme cold, the thermometer going down to zero or lower on twenty-seven of the thirty-one days. At the Station, the care of live stock and poultry, the hauling of feed and manure, the cleaning and grading of seeds, and the repair of implements and tools, have been the main lines of work engaging attention. In the district, farmers have been hauling wood for buildings and for fuel, besides bringing hay, straw, meat and vegetables to market."

Lennoxville, Que.—J. A. McClary, Superintendent, reports:—"January has been very cold, the thermometer dropping below zero on twenty-five different days, the maximum being 35.0, the minimum -44.0, and the mean 1.60, compared with extremes of 43.0 and -27.0 and a mean temperature of 16.46 a year ago. The sunshine totals 84.6 hours, compared with 38.5 hours last year. The precipitation amounts to 2.11 inches, while a year ago it totalled 1.90 inch. The extremely cold weather which has prevailed during December and January has made it possible for farmers and others to get in ice of extra good quality. At present, there is sufficient snow, to enable farmers to draw their firewood. The severe weather experienced so far this winter has been very detrimental to the water supply on many farms in the district, some farmers being obliged to draw water quite a distance for their stock. Hay and straw are very scarce. Hay is selling as high as \$30 a ton, delivered."

Brandon, Man.—W. C. McKillican, Superintendent, reports:—"The weather during January has been mostly cold and stormy. The 17th to the 27th was a period of intense cold, the mercury being below zero the whole time. High winds have piled up the snow, resulting in very poor trails. The work engaging attention at the

Experimental Farm has included the hauling and cutting of feed for stock, cleaning grain, and the rather unusual task here of shelling seed corn, of which a considerable quantity of several varieties ripened during the exceptionally hot summer of 1919."

Indian Head, Sask.—N. D. MacKenzie, Acting Superintendent, reports:—"The first two days of January were very cold, then followed a milder spell to the 16th, when a severe drop in temperature was experienced, which lasted for the balance of the month. Snow has fallen on five days, giving a total of 21.60 inches; this, owing to high winds, has drifted up the roads to a great extent. In this district, very little teaming had to be done during the month, as the bulk of the grain already had been delivered to the elevators. The work on the Experimental Farm has included hauling straw and manure, crushing feed, cleaning seed grain and caring for the stock and poultry."

Rosthern, Sask.—Wm. A. Munro, Superintendent, reports:—"The first part of January was rather mild, but the latter half has been very severe. Coupled with the severe weather, the feed shortage is telling adversely on live stock, and from various points reports are coming in of cattle and horses dying from some disease that seems to be little understood. It seems, however, that none of the stock that is dying is well nourished or sheltered. Under the circumstances, with no food but straw, and a great deal of that from rusted wheat, it is little wonder that there is a high mortality. At the Experimental Station, the calves and young cattle are in corrals with a shed to run into, and are doing well. These cattle are watered twice a day and are fed all the hay they will eat up clean, with 2 lbs. of meal per day to the calves and 3 lbs. to the young cattle."

Scott, Sask.—M. J. Tinline, Superintendent, reports:—"A rather mild spell prevailed during the first half of January, but from the 15th to the 31st the usual midwinter weather has been experienced. The snowfall totals 13.0 inches, which is the heaviest on record at this Station for this period of the year. While the heavy snowfall will mean more moisture for the coming season, it is making ranging difficult for live stock. Many farmers are doubtful about their roughage proving sufficient to carry them through the winter. At the Station, the work engaging attention has included caring for the live stock and preparing grain for seed."

Lacombe, Alta.—B. C. Milne, Assistant to the Superintendent, reports:—"One of the coldest spells on record in the history of this Station has been experienced during January. While a temperature of -50.3 has been experienced, this district has been comparatively free from storms, and all live stock has come through the month without any losses. However, on the open land in the north-eastern part of Central Alberta, some animals are said to have died owing to exposure and lack of feed. Prices for feed have increased during January, good hay now costing about \$33 per ton on cars. Prices for live stock have also advanced, and, although the movement has not been heavy, top prices were reached towards the end of the month."

Lethbridge, Alta.—W. H. Fairfield, Superintendent, reports:—"The first half of January was comparatively mild; but from the 16th to the 30th, extremely low temperatures have been recorded. On the morning of the 23rd, the thermometer dropped to -39.5 . Snow has fallen on six different days, the total precipitation (in melted snow) amounting to $.84$ of an inch. The mild weather during the first part of the month, relieved the food situation for live stock to a very material extent; but during the cold spell which has prevailed since some losses have been reported, particularly among work horses that had been turned out for the winter."

Invermere, B.C.—R. G. Newton, Acting Superintendent, reports:—"During most of January there was fairly mild winter weather, but towards the end of the month it stiffened up considerably, the thermometer dropping to -25.0 on the 24th and 25th. The mean temperature is 12.7 , which is about the average. The precipitation totals 1.88 inches, nearly all of it consisting of snow. Sleighing is good throughout the district and the harvesting of ice has commenced, the blocks being of very good quality. Reports from the district indicate that some of the range stock is in very poor shape, and that quite a number of animals have died."

Summerland, B.C.—R. H. Helmer, Superintendent, reports:—"January has been colder than a year ago, the mean temperature being 24.68 as compared with 31.01 in 1919. The precipitation totals 1.64 inch, as against 0.82 of an inch a year ago. In this district, hay is very scarce and high in price. Everything points to a good fruit year. The buds are in good condition and, if there is a favourable spring a fairly heavy crop of apples may be expected. Cordwood has been very scarce and high priced. Several wood-cutting outfits are working this winter and the supply will probably be greater a year from now. Last autumn having been very dry, fall grain is poor. Roads have improved with the frost, but will be in poor shape when the thaw comes. Work engaging attention at the Station, has included feeding the stock, hauling gravel, clearing land, and sawing cordwood; also the building of a boarding house."

Agassiz, B.C.—W. H. Hicks, Superintendent, reports:—"The weather during the early part of January was bright and clear, with occasional strong winds the temperature ranging from 46.0 to 30.0 . On three days during the latter part of the month, snow has fallen to the extent of 11.0 inches. A very heavy rainfall, totalling 8.04 inches, was recorded from the 16th to the 18th. Live stock in the district is in good condition, although, owing to the long winter, feed is getting scarce."

Sidney, Vancouver Island, B.C.—Lionel Stevenson, Superintendent, reports:—"Conditions during January have been very favourable for outdoor work generally. Very little frost has been experienced and most of the 3.28 inches of precipitation has been recorded during the closing week of the month. Some ploughing has been done on upland areas, and a few small areas have been

seeded with an oat and vetch mixture for fodder. On many farms, the pruning of fruit trees and of small fruit bushes occupied considerable time. Conditions for tile drainage have been favourable, and in a few instances farmers have put down a cement drain tile that is now being manufactured in the district. The live stock in this section is in good condition. For local needs, there is an ample supply of feed other than grain. Dairy cows and poultry are in demand."

The records of temperature, precipitation and sunshine at the several Experimental Farms and Stations for the month of January are given in the following table:—

Meteorological Record for January, 1920.

Experimental Farm or Station at—	Degrees of Temperature F.			Precipitation in inches	Hours of Sunshine.	
	High-est.	Low-est.	Mean.		Possible.	Actual.
Ottawa, Ont.....	33.8	-29.0	1.88	33.0	285	111.2
Charlottetown, P.E.I.....	35.0	-17.0	8.12	1.45	281	87.9
Kentville, N.S.....	38.0	-19.0	10.10	2.91	286	59.9
Nappan, N.S.....	36.0	-21.0	7.05	1.40	285	92.1
Fredericton, N.B.....	35.0	-25.0	-4.10	1.25	283	110.2
Ste. Anne de la Pocatière, Que.....	28.2	-31.6	1.80	0.90	278	86.4
Cape Rouge, Que.....	32.0	-29.7	1.93	3.50	278	71.1
Lennoxville, Que.....	35.0	-44.0	1.60	2.11	285	84.6
Brandon, Man.....	30.0	-40.0	-6.90	1.70	268	88.3
Indian Head, Sask.....	33.0	-42.0	-3.80	2.16	266	63.6
Rosthern, Sask.....	31.8	-45.0	-7.00	12.0	252	102.5
Scott, Sask.....	30.3	-41.0	-3.50	1.30	255	100.7
Lacombe, Alberta.....	43.8	-50.3	5.07	1.34	257	91.0
Lethbridge, Alberta.....	54.0	-39.5	11.31	0.84	269	79.3
Invermere, B.C.....	42.0	-25.0	12.70	1.88	266	54.2
Summerland, B.C.....	57.0	5.0	24.68	1.64	268	45.4
Agassiz, B.C.....	52.0	18.0	32.21	15.08	271	153.8
Sidney Vancouver I., B.C.....	54.0	23.0	37.00	3.28	273	49.1

E. S. ARCHIBALD,

Director Experimental Farms.

Ottawa, February 13, 1920.

Argentina.—A cablegram dated March 18, received by the Department of Trade and Commerce, gives the first estimate of the yield of cereals for the season 1919-20 for Argentina as follows:—

	Bushels.
Wheat.....	213,848,000
Linseed.....	41,731,000
Oats.....	53,170,000

CROP REPORT FROM ONTARIO.

The Ontario Department of Agriculture reports (March 2) that wells have gone dry, or are very low in content, on many farms all over the province, and owners of live stock have to draw water a considerable distance in some cases. The Victoria representative attributes the lack of water to the absence of the usual winter thaws. Considering the wintry conditions which have been prevailing, stock has been about normal, although many of the cattle are going to the yards somewhat thin, as grain is being rather sparingly fed, owing to the shortness of the supply. About the usual number of cattle appear to be on hand. Good dairy cows are reported to be selling in Welland from \$125 to \$175, while Peel places sales at "from \$150 up." Prince Edward says: "At a sale last week a herd of dairy cattle averaged \$130. At another sale two days later, a herd of grade cows, somewhat undersized, sold at from \$170 to \$180 each. Two grade brood sows sold for \$85 and \$100." Hogs are not so plentiful as formerly. Regarding the sale of horses, Peel states that good chunks are going at from \$125 to \$150 and that there are slow sales of draught foals at about \$50. Corn is selling on the local market in Essex at \$1.30 a bushel. Fall wheat and clover are still under cover, and have been practically so since the first big snowfall early in the season. Hay is still sufficient for local needs in most cases, although a number of farmers will have to buy. It is reported as selling from \$22 to \$32 a ton.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Board of Agriculture reports (February 1) that the weather of January was mild but wet, and the rains hindered field work in all parts of the country. In the west little cultivation was possible, except on the lightest lands, but in the east conditions were rather more favourable, and fair progress was made, though heavy land was generally unfit to work. Cultivation is still fairly well forward for the time of year. Young crops have done well during the mild weather, though occasionally they have suffered from the wet on low-lying, heavy lands. Wheat is very promising, being regular and healthy, and oats are also satisfactory. Beans are a good plant, but are often backward. Ewes are healthy, but they are not in good condition as a rule; they have generally suffered somewhat owing to the scarcity of keep and the wet weather, and have frequently lost condition during January. Lambing prospects are, however, considered favourable. The fall of lambs among early flocks has been satisfactory, and the young lambs are healthy and doing well. The scarcity of winter keep is telling on other live stock also, and they are usually only in fair condition. The mild weather, which has allowed cattle to be kept in the fields to a greater extent than usual, has helped to conserve the

small stocks of fodder, but supplies are still short, though the position in this respect is relatively easier than a month ago. There is a sufficient supply of labour in practically all districts, but skilled men, more especially horsemen, cattlemen and hedge cutters, are not always available.

Ireland.—The production in 1919 of the Irish potato crop is reported as 102,539,285 bushels from 588,802 acres, as compared with 144,231,136 bushels from 701,847 acres in 1918 and 155,035,627 bushels from 709,263 acres in 1917. The average yield per acre in 1919 was 175·47 bushels as against 205·33 bushels in 1918, 220·27 in 1917 and 205·33 bushels, the average for the ten years 1909-18. The produce in 1919 of cereal crops with comparative figures for 1918 in brackets was in bushels as follows: Wheat 2,451,994 (5,690,434); oats 80,508,650 (95,434,281); barley 8,125,014 (8,359,316). Of turnips the production in 1919 was 167,509,328 bushels, as compared with 197,992,368 bushels in 1918; of mangolds 53,446,773 bushels, as against 76,184,715 bushels, and of cabbage 327,716 short tons against 380,119.

India.—General rains have occurred in the central region and in the northwest, where the sowing of spring crops, of which wheat is by far the most important, was being continued until the middle of January. It is thought likely that the total acreage under wheat will be about equal to the normal, and the average condition is still good, although the Punjab remains with out adequate moisture.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

A cablegram received by the Commissioner of the International Institute of Agriculture, Department of Agriculture, Ottawa, on February 23, states that in Spain the area sown to wheat is 9,511,000 acres as compared with 10,380,000 last year and 10,085,000 the average for the five years 1913-14 to 1917-18; and to barley 4,206,000 acres against 4,250,000 last year and an average of 3,860,000. In France the area sown to wheat is 11,369,000 acres against 10,980,000 last year and an average of 12,700,000, and to rye 1,959,000 acres against 1,810,000 and 2,170,000 acres. In Rumania the area sown to wheat is 1,321,000 acres against 2,970,000 last year and an average of 4,700,000. In India the area sown to wheat for the crop about to be harvested is 27,429,000 acres compared with 23,810,000 last year and a five years' average of 31,930,000 acres.

The condition of cereals is described as good in Belgium, Great Britain and Ireland, Spain and Italy, and average in Egypt.

The following table gives the latest figures of the total production of 1919, as published, in the International Crop Report of January, 1920, for the crops and countries named, as compared with 1918 and with the average of the five years 1913-1917.

Crops.	Number of Countries.	1918	1919	Average 1913-17
		Bushels	Bushels	Bushels
Wheat.....	15 (a)	2,246,400,000	2,095,860,000	2,162,900,000
Rye.....	10 (b)	208,100,000	211,680,000	181,100,000
Barley.....	14 (c)	713,000,000	567,547,000	625,050,000
Oats.....	14 (d)	2,420,850,000	2,091,615,000	2,273,500,000
Corn.....	6 (e)	2,722,300,000	3,136,080,000	2,995,300,000
Flaxseed.....	7 (f)	42,790,000	25,975,000	43,590,000
Potatoes.....	6 (g)	910,500,000	798,510,000	766,320,000
		short tons	short tons	short tons
Sugar beets.....	5 (h)	8,860,000	9,480,000	9,010,000

(a) Denmark, Spain, France, England and Wales, Scotland, Italy, Netherlands, Roumania, Switzerland, Bohemia, Canada, United States, British India, Japan, Algeria, Tunis.

(b) Denmark, Spain, France, Italy, Netherlands, Roumania, Switzerland, Bohemia, Canada, United States.

(c) Denmark, Spain, France, England and Wales, Scotland, Italy, Netherlands, Roumania, Switzerland, Bohemia, Canada, United States, Japan, Algeria, Tunis.

(d) Denmark, Spain, France, England and Wales, Scotland, Italy, Netherlands, Roumania, Switzerland, Bohemia, Canada, United States, Japan, Algeria, Tunis.

(e) Spain, Italy Roumania, Switzerland, Canada, United States.

(f) Italy, Roumania, Canada, United States, British India, Japan, Tunis.

(g) England and Wales, Scotland, Italy, Netherlands, Switzerland, Canada, United States.

(h) Spain, Netherlands, Switzerland, Canada, United States.

THE WEATHER DURING JANUARY.

The Dominion Meteorological Office reports that the temperature was below the average throughout the Dominion, except in the extreme southern portions of British Columbia and Alberta, where the average was just maintained. The negative departures were as follows:—In British Columbia from 0° to 4°. In the western provinces from 0° to 6°, in Ontario from 7° to 12°, in Quebec from 8° to 9°, in the Maritime provinces from 7° to 12°. The precipitation in British Columbia and over the western provinces, except in one or two isolated points, was above the average, while over the remainder of the Dominion, irrespective of a few scattered places in Ontario, it was everywhere below the average. It was altogether as snow outside of Vancouver Island and the lower mainland of British Columbia, and in southern New Brunswick and in Nova Scotia, where both rain and snow were recorded, but in the two latter provinces the rain was of an almost inappreciable amount.

PRICES OF AGRICULTURAL PRODUCE, 1920.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

(Furnished by the Board of Grain Commissioners for Canada).

Grain and Grade.	Jan. 3.		Jan. 10.		Jan. 17.		Jan. 24.		Jan. 31.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—										
No. 1 hard.....	2 15	—	2 15	—	2 15	—	2 15	—	2 15	—
No. 1 Nor.....	2 15	—	2 15	—	2 15	—	2 15	—	2 15	—
No. 2 Nor.....	2 12	—	2 12	—	2 12	—	2 12	—	2 12	—
No. 3 Nor.....	2 08	—	2 08	—	2 08	—	2 08	—	2 08	—
No. 4 special.....	2 02	—	2 02	—	2 02	—	2 02	—	2 02	—
No. 5 special.....	1 91	—	1 91	—	1 91	—	1 91	—	1 91	—
No. 6 special.....	1 81	—	1 81	—	1 81	—	1 81	—	1 81	—
Feed.....	1 71	—	1 71	—	1 71	—	1 71	—	1 71	—
Oats—										
No. 2 C.W.....	0 92½—0 94½		0 92½—0 95½		0 90½—0 92½		0 93—0 96		0 94½—0 95½	
No. 3 C.W.....	0 88½—0 90½		0 88½—0 91½		0 86½—0 88½		0 88½—0 93		0 91½—0 93	
No. 1 feed ex.....	0 88½—0 90		0 89—0 91		0 87½—0 89		0 88½—0 93		0 91½—0 93	
No. 1 feed.....	0 86½—0 88½		0 85½—0 89½		0 84½—0 86½		0 86½—0 91		0 89—0 89½	
No. 2 feed.....	0 82—0 85		0 83½—0 85½		0 81½—0 83½		0 83½—0 87		0 86½—0 87½	
Barley—										
No. 3 C.W.....	1 61½—1 67½		1 65½—1 71½		1 71½—1 72½		1 78½—1 80½		1 82½—1 83½	
No. 4 C.W.....	1 52½—1 62½		1 45½—1 49½		1 47½—1 50½		1 46½—1 49		1 47½—1 49½	
Rejected.....	1 31½—1 34		1 31½—1 37½		1 34½—1 37½		1 34½—1 37½		1 35½—1 35½	
Feed.....	1 31½—1 34½		1 31½—1 36½		1 32½—1 37½		1 34½—1 36		1 35½—1 35½	
Flax—										
No. 1 N.W.C.....	4 72—4 80		4 74—4 04½		4 91½—5 11½		4 91—5 10½		5 09½—5 19½	
No. 2 C.W.....	4 68—4 76		4 68—4 81½		4 80½—4 95½		4 79—4 92½		4 91½—5 01	
No. 3 C.W.....	4 32—4 43		4 39—4 52½		4 49½—4 66½		4 47—4 60½		4 59—4 67	

II. Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1919-20.

(From the Monthly Crop Report of the United States Department of Agriculture.)

Grade and Market.	October.		November.		December.		January.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red Winter, No. 2—								
St. Louis.....	2 21	—2 29	2 24	—2 41	2 40	—2 56	2 60	—2 84
Chicago.....	2 23	—2 27½	2 24	—2 37½	2 38½	—2 47	2 50	—2 71
New York (f.o.b. afloat).....	2 38	—	2 38	—	2 75	—2 80	2 65	—
Corn, No. 2, mixed—								
St. Louis.....	1 39	—1 49	1 44	—1 64	1 50	—1 55	1 50	—1 56
Corn No. 2—								
Chicago.....	1 37	—1 53	1 37	—1 66	1 42	—1 60	1 42	—1 58½
Oats, No. 2—								
St. Louis.....	0 67	—0 72	0 70	—0 77	0 78	—0 86½	0 84½	—0 92
Chicago.....	0 70½	—0 74½	0 71½	—0 80	0 75	—0 85½	0 84½	—0 91
Rye No. 2—								
Chicago.....	1 32½	—1 42½	1 33½	—1 50½	1 50	—1 82	1 66	—1 85½

III. Range of Prices of Imported Grain and Flour at British Markets, 1920.

Mark Lane.	Jan. 5-26.	Liverpool.	Jan. 6-27.
Wheat—	\$ c.	Wheat—	\$ c.
Canadian No. 1.....	2 29½ —	Nor. Man. No. 1.....	1 92½ —
Canadian No. 2.....	2 26½ —	Red winter No. 1.....	1 89½ —
American spring.....	2 26½ —	Hard winter No. 1.....	1 92½ —
American hard winter.....	2 29½ —	Australian.....	1 94½ —
American red winter.....	2 23½ —		
Durum.....	2 23½ —		
Australian.....	2 32½ —		
Argentine.....	2 26½ —		
Oats ¹ —			
Canadian.....	1 62½—1 65½		
American.....	1 39½—1 42½		
Chilian.....	1 60½—1 62½		
Flour—			
Canadian spring.....	11 25 —		
American spring.....	11 25 —		
American winter.....	11 25 —		
Australian.....	11 25 —		

¹ For January 5, Canadian 1·57½—1·60½; American 1·34½—1·37; Chilian, 1·55½—1·57½.

IV. Average Price of British-grown Grain, 1920.

(From the "London Gazette" as published pursuant to s. 8 of the Corn Returns Act, 1882.)

Week ended.	Wheat.		Barley		Oats	
	per quarter.	per bushel.	per quarter.	per bushel.	per quater.	per bushel.
	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
January 3.....	72 7	2·208	107 1	3·126	57 8	1·528
" 10.....	72 6	2·205	109 7	3·200	57 7	1·526
" 17.....	72 7	2·208	110 6	3·227	57 6	1·524
" 24.....	72 7	2·208	108 11	3·180	57 10	1·532
" 31.....	72 7	2·208	106 2	3·100	58 7	1·552
Average.....	72 7	2·208	108 5	3·167	57 10	1·532

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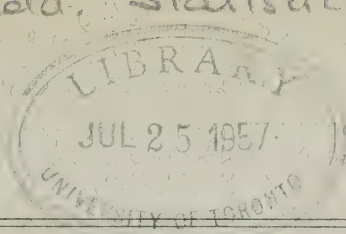


OTTAWA

J. DE LABROQUERIE TACHÉ

Printer to the King's Most Excellent Majesty

1920



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MONTHLY BULLETIN OF AGRICULTURAL STATISTICS

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No. 139

DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. EDITOR: ERNEST H. GODFREY F.S.S.,
DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

AVERAGE YIELDS OF FIELD CROPS FOR DECENNIAL PERIODS.

In the following table are shown the annual average yields per acre of all field crops in Canada for the decennial periods 1909 to 1918 and 1910 to 1919. These average yields have been calculated to the nearest quarter fraction, for each grain crop, by provinces and for the Dominion as a whole, from the reports of crop correspondents of the Dominion Bureau of Statistics. Similar averages for the decennial period 1908 to 1917 were published in the Monthly Bulletin of April, 1918, pp. 104-6.

Annual Average Yields per acre of Field Crops, for Canada and by Provinces, for the ten years 1909-18 and 1910-19.

Crops.	Ten-year average 1909-18.	Ten-year average 1910-19.	Crops.	Ten-year average 1909-18.	Ten-year average 1910-19.
	bush. per acre.	bush. per acre.		bush. per acre.	bush. per acre.
Canada—			Nova Scotia—		
Fall wheat.....	22.50	22.50	Spring wheat.....	21.25	20.00
Spring wheat.....	17.75	16.50	Oats.....	32.00	32.50
All wheat.....	18.25	16.75	Barley.....	26.50	28.25
Oats.....	34.50	33.25	Rye.....	18.00	20.25
Barley.....	26.75	25.75	Peas.....	25.75	20.25
Rye.....	17.50	16.00	Beans.....	19.75	16.50
Peas.....	16.25	15.75	Buckwheat.....	23.75	23.75
Beans.....	16.75	16.25	Mixed grains.....	33.75	32.00
Buckwheat.....	22.00	23.00	Potatoes.....	190.25	183.00
Mixed grains.....	33.75	33.25	Turnips, etc.....	413.75	426.50
Flax.....	10.00	9.40		tons.	tons.
Corn for husking.....	52.75	53.75	Hay and clover.....	1.75	1.70
Potatoes.....	149.50	146.00	Fodder corn.....	8.25	8.80
Turnips, etc.....	362.25	352.25	Alfalfa.....	3.25	3.19 ¹
	tons.	tons.	New Brunswick—	bush.	bush.
Hay and clover.....	1.50	1.50	Spring wheat.....	18.25	18.00
Fodder corn.....	9.00	8.85	Oats.....	28.75	29.25
Sugar beets.....	9.00	9.10	Barley.....	25.75	25.75
Alfalfa.....	2.50	2.40	Peas.....	19.00	16.00
Prince Edward Isd.—	bush.	bush.	Beans.....	22.00	16.50
Spring wheat.....	19.00	18.75	Buckwheat.....	24.00	23.75
Oats.....	34.75	34.75	Mixed grains.....	31.00	31.50
Barley.....	28.00	28.00	Potatoes.....	186.00	176.25
Peas.....	21.00	18.50	Turnips, etc.....	346.00	346.00
Buckwheat.....	26.50	26.00		tons.	tons.
Mixed grains.....	40.75	41.75	Hay and clover.....	1.50	1.40
Potatoes.....	180.00	171.75	Fodder corn.....	7.00	5.20
Turnips, etc.....	483.50	483.50	Quebec—	bush.	bush.
	tons.	tons.	Spring wheat.....	16.50	16.50
Hay and clover.....	1.50	1.55	Oats.....	26.75	26.75
Fodder corn.....	10.25	9.55			

¹ Average of eight years 1910-17.

Annual Average Yields per acre of Field Crops, for Canada and by Provinces, for the ten years 1909-18 and 1910-19—con.

Crops.	Ten-year average 1909-18.	Ten-year average 1910-19.	Crops.	Ten-year average 1909-18.	Ten-year average 1910-19.
Quebec—con.	bush. per acre.	bush. per acre.	Manitoba—con.	tons. per acre.	tons. per acre.
Barley.....	23-25	23-00	Hay and clover.....	1-25	1-40
Rye.....	16-00	15-50	Fodder corn.....	5-50 ¹	5-75
Peas.....	12-25	15-00	Alfalfa.....	2-25 ¹	2-25
Beans.....	17-00	17-25			
Buckwheat.....	22-00	25-75	Saskatchewan—	bush.	bush.
Mixed grains.....	26-25	26-00	Spring wheat.....	17-50	16-00
Flax.....	10-25 ¹	10-50	Oats.....	35-75	33-25
Corn for husking.....	23-50	28-50	Barley.....	24-75	23-75
Potatoes.....	143-50	144-75	Rye.....	15-75	13-25
Turnips, etc.....	289-00	288-25	Peas.....	21-00 ²	20-00
	tons.	tons.	Mixed grains.....	29-25 ¹	30-25
Hay and clover.....	1-50	1-50	Flax.....	10-00	9-30
Fodder corn.....	8-25	5-95	Potatoes.....	148-25	148-25
Alfalfa.....	2-50 ¹	2-40	Turnips, etc.....	251-25	249-25
				tons.	tons.
Ontario—	bush.	bush.	Hay and clover.....	1-50	1-35
Fall wheat.....	22-75	22-75	Fodder corn.....	3-50 ¹	4-95
Spring wheat.....	19-75	19-00	Alfalfa.....	1-75 ¹	1-80
All wheat.....	22-25	22-25			
Oats.....	35-25	34-75	Alberta—	bush.	bush.
Barley.....	30-25	29-50	Fall wheat.....	21-00	20-75
Rye.....	17-50	17-00	Spring wheat.....	19-00	16-75
Peas.....	16-75	15-75	All wheat.....	19-00	17-00
Beans.....	16-50	15-50	Oats.....	36-50	36-25
Buckwheat.....	21-25	21-00	Barley.....	26-00	25-50
Mixed grains.....	36-00	35-50	Rye.....	21-50	19-25
Flax.....	14-00 ¹	13-25	Peas.....	17-75 ¹	18-00
Corn for husking.....	56-25	57-00	Mixed grains.....	25-75 ¹	28-50
Potatoes.....	122-25	114-75	Flax.....	9-75	9-10
Turnips, etc.....	387-50	368-00	Potatoes.....	147-75	151-50
	tons.	tons.	Turnips, etc.....	234-00	227-25
Hay and clover.....	1-50	1-45		tons.	tons.
Fodder corn.....	9-50	9-55	Hay and clover.....	1-50	1-35
Sugar beets.....	9-00	9-10	Fodder corn.....	2-00 ¹	2-35
Alfalfa.....	2-50	2-40	Alfalfa.....	2-25 ¹	2-25
Manitoba—	bush.	bush.	British Columbia—	bush.	bush.
Fall wheat.....	21-00 ¹	21-00 ¹	Fall wheat.....	30-00 ¹	29-00
Spring wheat.....	17-75	17-25	Spring wheat.....	26-75 ¹	25-50
All wheat.....	17-75	17-50 ¹	All wheat.....	27-75 ¹	26-75
Oats.....	35-25	34-25	Oats.....	55-00 ¹	54-25
Barley.....	25-75	24-50	Barley.....	34-50 ¹	34-00
Rye.....	17-00	15-50	Peas.....	28-00 ¹	27-25
Mixed grains.....	29-00 ¹	27-25	Mixed grains.....	40-75 ¹	40-25
Flax.....	12-00	10-75	Potatoes.....	208-75 ¹	204-25
Potatoes.....	156-75	150-00	Turnips, etc.....	451-00 ¹	435-50
Turnips, etc.....	271-75	249-25		tons.	tons.
			Hay and clover.....	2-25 ¹	2-10
			Fodder corn.....	8-50 ¹	9-70
			Alfalfa.....	3-50 ¹	3-40

¹ Average of nine years, 1910-18.

² “ “ eight years, 1911-18.

For both decennial periods the average yield per acre of winter wheat for Canada is 22½ bushels, this being half a bushel less than the average for the period 1908-17. For spring wheat the average for the decennium 1910-19 has fallen to 16½ bushels, as against

17 $\frac{3}{4}$ bushels, 1909-18 and 19 bushels 1908-17. The last named rate of 19 bushels was largely due to the abundant yield of 1915, and the reduced rate of 16 $\frac{1}{2}$ bushels is attributable to the four poor successive seasons of 1916 to 1919. For all wheat the average is 16 $\frac{3}{4}$, 1910-19, 18 $\frac{1}{4}$, 1909-18, and 19 $\frac{1}{4}$, 1908-17. All the other crops show for Canada similar reductions in the averages except buckwheat, which is raised to 23 bushels, and corn for husking to 53 $\frac{3}{4}$ bushels, which is one bushel more than 1909-18, but is the same as for 1908-17. Hay and clover, alfalfa and sugar beet remain practically unchanged. As between the provinces the highest averages for spring wheat for the decennium 1910-19 is in British Columbia, 25 $\frac{1}{2}$ bushels, Nova Scotia is next with 20 bushels, and the remaining provinces range in order as follows: Ontario 19, Prince Edward Island 18 $\frac{3}{4}$, New Brunswick 18, Manitoba 17 $\frac{1}{4}$, Alberta 16 $\frac{3}{4}$, Quebec 16 $\frac{1}{2}$ and Saskatchewan 16.

Dominion Bureau of Statistics,
Ottawa, April 14, 1920.

ERNEST H. GODFREY,
Editor.

FARM CONDITIONS IN ONTARIO.

The Ontario Department of Agriculture reports (March 22) that in many counties the new fall wheat is now uncovered, but on the whole looks well. Some fields are perhaps a little brown, but the crop generally is said to be well rooted. Low lying spots are being threatened by ice. Dairy cows are still in good demand. Peel quotes sales at from \$100 to \$150 for fair and up to \$200 for extra. Hogs are scarce, and prices have strengthened, sales being recorded at from \$18.25 to \$19 per cwt. Little pigs are selling in Haldimand at \$8 a pair. In some counties too many bacon hogs are being put on the market in an unfinished condition, owing to the scarcity of grain. Brant reports some being shipped as weighing only from 130 to 140 lb. Peel reports that a local exchange has shipped seventy-five horses during the last two weeks, and that Nova Scotians are buying a number of the better sort. Brant states: "A few good horses at a recent sale brought as high as \$235 each; others of rather fair quality are selling at from \$150 to \$180, and second grade animals are going lower." Norfolk says: "A New York dealer has been up here trying to buy a few carloads of hay, but finds it hard to procure. He has been paying \$25 a ton at the barn. Straw is in good demand at from \$10 to \$15 a ton."

Corrigendum: Wages of Farm Help in Ontario and in Canada, 1918.—The average wages for male farm help, including board, for the province of Ontario in 1918, which were printed on page 32 of the February issue of the Monthly Bulletin as \$425, should read \$607. The average for all Canada (page 31 of the same issue) should read \$681 instead of \$617.

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The weather during February, although colder than a year ago, has been about the same as the average for the previous ten years, the mean temperature being 12·60, as compared with 17·60 in 1919 and with an average mean of 11·58 for February from 1912 to 1919. The highest temperature recorded is 33 and the lowest -25; while, for the corresponding period of 1919, the maximum was 36 and the minimum -8·8. The precipitation totals 2·20 inches, made up entirely of snow—compared with 1·59 inch last year, consisting of 0·04 of an inch of rain and 15·5 inches of snow. The bright sunshine recorded averages 4·52 hours a day, against 4·94 hours in 1919, and an average of 4·51 hours a day for this time during the previous ten years.

During the month the contractors have been engaged at putting up the superstructure of the new Dairy Building, work on the foundation of which was started early in the winter. This promises to fill a long-felt want of the Animal Husbandry Division, in so far as the Ottawa Farm is concerned.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—"The first week of February was fine and cold, with very little sunshine. A snow-storm which began on the 6th ended with a heavy rainfall on the 7th. This storm wrought a great deal of damage in the neighbouring provinces, on account of the silver thaw which accompanied it. The second week of February had a number of flurries of snow, considerable east wind, and very little sunshine. The heaviest wind storm for many years occurred on the 19th, breaking trees and unroofing barns. This was followed by blustery weather with moderate temperatures. A second heavy storm occurred on the 25th. The total precipitation for the month is 4·81 inches, most of it recorded on the three occasions mentioned. Following the storm of the 19th, the country roads were practically impassable, owing to the great freshets and large ponds of water which formed everywhere. The temperatures throughout February have been very mild compared with the two previous months, and live stock have been much more comfortable and have required less feed. In the Egg-laying Contest here, the production of eggs, which was greatly delayed owing to the severity of the winter up to the opening of February, has greatly improved, and the majority of the birds are doing well at the close of the month."

Kentville, N.S.—W. S. Blair, Superintendent, reports:—"The mean temperature for February is 21·8, compared with an average of 21·13 for the corresponding period of the five previous years. The highest temperature recorded is 52 and the lowest -24, registered on the morning of the 1st; but the thermometer has not dropped below zero since the 2nd. The precipitation totals 4·83 inches, made up of 2·73 inches of rain and 21 inches of snow; while the average for the five previous years was 2·89 inches, made up of 1·59 inch of rain and 13 inches of snow. The sunshine aggregates 68·7 hours, against a February average of 90·7 hours for the five previous years.

There was a strong gale on the 19th, which unroofed barns on some farms in this district."

Nappan, N.S.—W. W. Baird, Superintendent, reports:—"The temperatures recorded during February range a little higher than normal, the mean being 19.77, as against an average of 15.67 for the previous six years. The precipitation, which is much heavier than usual, totals 4.99 inches, made up of 2.89 inches of rain and 21 inches of snow; but the bright sunshine aggregates only 70 hours, none at all being recorded on sixteen days. Below zero temperatures have been registered on four different occasions. A thaw on the 6th and 7th, when there was a rainfall of 2.2 inches in twenty-four hours, relieved a threatened water famine, as the continuously cold weather which prevailed for about two months was resulting in the drying up of brooks and wells. The deep frost penetration has resulted in the freezing of many water pipes in most of the towns in the district. A severe gale from the southeast, experienced on the 19th, damaged many barns and chimneys and considerably demoralized the telegraph and telephone services.

Fredericton, N.B.—W. W. Hubbard, Superintendent, reports:—"February has been one of the roughest months recorded for years, one feature being a hailstorm, in the southern part of the province, that made a coating of ice which while not strong enough to carry heavy horses, was yet so stiff as to require chopping out before roads were passable. The result has been that for over three weeks hundreds of miles of road have never been opened up for traffic and whole districts have been cut off from the outside world. There has been a total snowfall of 52 inches, and, as most of the storms have been accompanied by high winds, conditions have been very unsatisfactory both on highways and railways. The weather has not been excessively cold, the mean temperature, 16, being one degree above the average, though four degrees lower than last year. The sunshine has aggregated 97.5 hours, which is about fifty hours less than usual. Work has been more or less at a standstill, teams and men having to battle continuously with snow and hail. Live stock are feeling the effects of the extremely high prices of hay and feed. In some places, young orchards are more or less buried and will require attention to prevent breaking down of the trees when the snow settles."

Ste. Anne de la Pocatière, Que.—Jos. Bégin, Superintendent, reports:—"February has been cloudy and windy, with some exceptionally fine days. The highest temperature recorded is 35.2, the lowest -28 and the mean 12.8, compared with extremes of 35.2 and -4.3 and a mean of 17.7 for the corresponding period in 1919. The precipitation totals 2.70 inches, made up entirely of snow, being about the same as that of last year for this month. The bright sunshine averages 2.15 hours a day, compared with 4.8 hours a day in 1919. Although the snowfall has not been heavy so far, the winter certainly has been a severe one in this section, and the deep penetration of the frost is damaging to drains and other pipes. On many farms, scarcity of water is doubling the work and increasing the

expense of keeping the live stock. Hay is being imported on account of a feed shortage resulting from fodder being used in considerable quantity earlier in the fall than usual, this year, and also on account of the increased consumption due to the severity of the winter. Mill feeds are being sold in limited quantities by local importers, especially bran and feed oats, which become more difficult to get every day. Seed grain is also being imported, but only a small quantity is needed compared with previous years."

Cap Rouge, Que.—G. A. Langelier, Superintendent, reports:—"As compared with the average for the corresponding period of the previous eight years, in February there has been more mild and dull weather, and more precipitation than usual, the figures being, respectively, 18.51 and 8.71 for mean temperature, 67 and 82.6 for sunshine, and 3.40 and 2.88 inches for precipitation. At the Station, the new horticultural barn is nearly completed. This building, with its large and well insulated cellars, of about 7,000 cubic feet of space, should be a great help, especially in keeping over biennials for seed production. Seventeen of the thirty mares of the French Canadian breed which are to be sent to the new Horse Farm near St. Joachim, Que., have arrived at their new quarters."

Lennoxville, Que.—J. A. McClary, Superintendent, reports:—"The weather during February has been quite cold, the mean temperature being 12.65, compared with 15.66 last year. The maximum temperature recorded is 44 and the minimum -47, compared with a highest of 44 and a lowest of -20 a year ago. The precipitation amounts to 1.90 inch, as against 1.23 inch last year. The bright sunshine totals 85.6 hours with 101.7 and 105.5 hours, respectively, for the corresponding periods of 1919 and 1918. In this district, farmers have been quite busy during the month, drawing lumber, preparing firewood for use, cleaning seed grain and in getting things into shape, as far as possible, for spring. There is a feed shortage in this section, and on this account, perhaps a little more than the usual amount of live stock has been sold at this season. Potatoes for seed are very scarce and high in price."

Brandon, Man.—W. C. McKillican, Superintendent, reports:—"The weather during February has been about normal for this climate. The mean temperature for the month is 3. The lowest temperature recorded is -31. The snowfall has been light, only 3 inches; but there has been a good deal of drifting, which has piled up the rather heavy snowfall of the previous month. Farm work at this time of year consists chiefly in the care of stock. There is a good supply of feed in most parts of Manitoba, and all classes of live stock are wintering well."

Indian Head, Sask.—N. D. Mackenzie, Acting Superintendent, reports:—"A period of moderate weather from February 1st to 12th was followed by a pronounced drop in temperature from the 13th to the 16th, but from the 17th to the 29th it has been milder. Snow has fallen on seven days; but, as there has been very little wind, the roads have been in good condition for teaming. During the

month there has been completed an experiment as to the relative values of crushed grade "A" screenings and crushed barley for finishing steers; and, in this test, better and cheaper gains are shown by the barley in spite of its higher price pound for pound. Another experiment being carried on relates to the feeding value of sunflower silage; in this, observations made so far would indicate that the latter is very palatable, but highly stimulating to the kidneys. The farm live stock is in excellent condition and the cattle have successfully passed another tuberculin test. Practically all farmers in this district have enough feed to see them through until the grass is available, and a number have been selling hay and oat sheaves at remunerative prices."

Rosthern, Sask.—Wm. A. Munro, Superintendent, reports:—"The weather during February has been moderate. Nevertheless, the feed problem throughout the district is very acute. Hay is selling at from \$25 to \$30 per ton, and oat straw at \$19 a ton, and both are difficult to obtain at any price. At the Experimental Station, the spring calves and the one-year and two-year old heifers, and the stock bull, are being wintered in corrals with a shed at one end for shelter. This experiment has been carried on for a number of years, and in every instance all the stock have done well provided they have been supplied with sufficient feed and available water. From the work in this line carried on here, it would seem that in this part of the country stables for cattle are necessary only for milch cows and calves dropped later than July."

Scott, Sask.—M. J. Tinline, Superintendent, reports:—"The weather has been unusually mild for February. Although the maximum temperature is only 35.7, the mean, 11.64, is the highest on record at this Station, with the exception of 1915, when the mean was 13.27. The lowest temperature is -20, whereas in other years it has varied from about -30 to -45 with the exception of 1915, when it was -10.8. The hours of sunshine and the precipitation are about normal. Mild weather prevailed from the 16th to the 18th, when a hard crust was formed on the snow. This has kept the snow from blowing, and the roads are in good shape. The crust, however, makes it difficult for stock to forage, a practice which is quite prevalent in most districts, on account of scarcity of feed. The feed shortage is not serious as yet, but an early spring would be appreciated."

Lacombe, Alberta.—B. C. Milne, Assistant to Superintendent, reports:—"Very favourable winter weather has been experienced throughout February. While the snowfall has not been heavy, it has been sufficient to ensure good sleighing, and farmers have made rapid progress in delivering their grain to the market. The demand for feed has been rather keen throughout the month, and in most districts the surplus has been pretty well cleaned up. At this Station, the live stock has wintered in splendid condition. The horses have been fed oat sheaves and hay, while wintering in the shelter of a bluff; sheep and dry cows have been fed hay and provided with a corral within an eight-foot board fence."

Lethbridge, Alberta.—W. H. Fairfield, Superintendent, reports:—"The weather during February has been fine and mild, which is particularly fortunate in so far as live stock are concerned. The highest temperature recorded is 49, the lowest -12 and the mean for the month is 24.21; while a year ago the maximum was 51.8, the minimum -26 and the mean 14.3. The bright sunshine totals 124 hours as compared with 100.7 hours for the corresponding period of 1919. Some snow has fallen during the month. The generous amount of precipitation in this form which has been recorded during the whole winter, by adding much needed moisture to the soil, makes the dry-land crop prospects for the approaching summer better than usual."

Invermere, B.C.—R. G. Newton, Acting Superintendent, reports:—"On the whole the weather during February has been ideal for winter, with fairly even temperatures and bright days. The mean temperature, 19.24, is above the average for the past five years. During the last week of the month it got a little colder, the thermometer registering below zero on several dates and reaching as low as -9. The precipitation recorded during the month, amounts to only 0.37 of an inch, which is below the average. The bright sunshine totals 153.7 hours, as compared with an average of 85.7 hours for February for the past five years. Sleighing is still general, but the roads are getting bare in places. Reports from the district indicate that some of the range stock is in very poor shape."

Summerland, B.C.—R. H. Helmer, Superintendent, reports:—"The weather during February has been ideal for the time of the year, with the nights cold and the days fine and bright. Only three inches of snow fell during the month, no other precipitation being recorded. The cold has kept the trees back and they should be in good condition this spring. The roads are quite dry, and this has facilitated the hauling of gravel and sand for the Station roads. The snow has now nearly all gone. Work at the Station has included gravelling the roads, cutting wood, and feeding the live stock. Pruning in the district is in full swing. Hay is very scarce and high in price. All classes of live stock are doing well."

Agassiz, B.C.—W. H. Hicks, Superintendent, reports:—"The weather during February has been unusually dry, bright, and spring-like. The precipitation recorded totals 2.04 inches, the least for any February since 1903. The bright sunshine totals 143.6 hours, which is also a record for the same period. Weather conditions have been ideal for ploughing, land clearing, hauling, and other farm work. The roads are in excellent condition for this season of the year. Generally speaking, live stock is in its usual spring condition. At the close of the month, eggs are selling, wholesale, around 60 cents a dozen, with good yields reported. There appears to be a brisk demand for eggs for hatching and for day-old chicks."

Sidney, Vancouver Island, B.C.—Lionel Stevenson, Superintendent, reports:—"The weather during February has been bright and clear and all that could be desired. The precipitation totals

0.61 of an inch. The bright sunshine aggregates 134.8 hours. The lowest temperature recorded is 29. The soil has been in good condition for operations in field and garden. Considerable ploughing has been done and a few small areas have been seeded to wheat, oats and vetches. Garden planting is general at the close of the month. Some hardy early flowering plants developed to full bloom. Orchard pruning, some early spraying, and the planting of small fruits have occupied the attention of fruit growers. Poultry keepers are experiencing an active demand for hatching eggs and for birds. The live stock of the district is in good condition. Farm labour is scarce."

Meteorological Record for February, 1920.

The records of temperature, precipitation and sunshine at the several Experimental Farms and Stations for the month of February are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature F.			Precipitation in inches.	Hours of Sunshine.	
	High-est.	Low-est.	Mean.		Possible.	Actual.
Ottawa, Ont.....	33.0	-25.0	12.60	2.20	303	131.3
Charlottetown, P.E.I.....	44.0	-15.0	22.36	4.81	300	73.2
Kentville, N.S.....	52.0	-24.0	21.80	4.83	303	68.7
Nappan, N.S.....	50.0	-16.0	19.77	4.99	303	70.0
Fredericton, N.B.....	38.0	25.0	16.00	6.93	301	97.6
Ste-Anne de la Pocatière, Que.....	35.2	-28.0	12.80	2.70	299	60.7
Cap Rouge, Que.....	39.0	-25.8	18.51	3.40	298	67.0
Lennoxville, Que.....	44.0	-47.0	12.65	1.90	303	85.6
Brandon, Man.....	33.7	-31.0	3.00	3.00	294	117.5
Indian Head, Sask.....	37.0	-30.0	9.93	0.80	293	85.2
Rosthern, Sask.....	39.7	-30.2	12.58	0.20	285	121.8
Scott, Sask.....	35.7	-20.0	11.64	0.28	287	118.7
Lacombe, Alberta.....	48.8	-15.6	19.67	0.40	289	146.2
Lethbridge, Alberta.....	49.0	-12.0	24.21	1.21	294	124.0
Invermere, B.C.....	41.0	- 9.0	19.24	0.37	293	153.7
Summerland, B.C.....	46.0	18.0	30.70	0.30	294	163.2
Agassiz, B.C.....	56.0	26.0	40.20	2.04	295	143.6
Sidney Vancouver I., B.C.....	53.0	29.0	39.10	0.61	297	134.8

March 13th, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Board of Agriculture reported (March 1) that the mild and generally dry weather of February was very favourable for field work, but in some districts in the north and west ploughing was checked by rains. On the whole, however, very good progress was made with cultivation, and this work is much more forward than is usual at the beginning of March. Spring sowing has been begun early, and large areas have already been sown in the south and east. Autumn-sown crops have improved and, except for beans

in some districts, are forward. Wheat is healthy and vigorous and a full plant, and winter oats and beans are very promising. It is estimated that there has been a considerable falling off in the area sown with wheat up to March 1, as compared with the areas sown at the corresponding date last year. Probably from one-fourth to one-third of the wheat will need a top-dressing in the spring.

Scotland.—The Board of Agriculture reported (February 1) that the wheat crop was vigorous and healthy, especially in the case of early sown fields. The area sown this year is estimated to show a considerable diminution varying from 10 p.c. in Central Perth and Sterling to 25 p.c. in the Lothians, 33 p.c. in Kincairdine and Fife, and 50 p.c. in Berwick and South Ayr. The condition of the potato crop is generally reported to be satisfactory, but in some cases, where they were lifted late, damage has occurred owing to frost.

Ireland.—The Department of Agriculture reports that the estimated average yield per acre of the flax crop in Ireland in 1919 was 23 stones of 14 lb., as compared with 17·5 stones in 1918, and 28·1 stones, the average for the ten years 1909-18. The extent in 1919 amounted to 95,610 acres, as against 143,355 acres in 1918. The total produce of the crop for 1919 is estimated at 13,720 tons against 15,703 tons in 1918. The total yield of hay in 1919 was 4,809,645 tons from 2,520,096 acres, an average yield of 1·9 ton per acre. In 1918 the corresponding figures were 4,728,183 tons from 2,470,417 acres, the average per acre being the same as in 1919.

India.—The Department of Statistics issued on January 31 the first wheat forecast of the season 1919-20 and on February 19 a supplementary memorandum for the period ended February 15. The first forecast, based upon reports representing 98·6 p.c. of the total wheat acreage of India, estimated the area sown at 27,429,000 acres, as against 23,448,000 acres, the revised figure at the corresponding date of 1918, and as compared with 23,806,000 acres, the finally revised area of 1918. The supplementary memorandum places the revised area at 27,502,000 acres, which represents an increase of 15·8 p.c., as compared with the final estimate of 1918. Weather conditions at sowing time were generally favourable, and the condition of the crop on January 31 was reported to be good. The report of February 19 stated that the winter rains had greatly improved the prospects of the standing crop, although cloudy weather accompanied by heavy rains induced rust in parts of Bombay. The present condition of the crop is reported to be generally good. Slight local damage by hail, frost, cold wind and insects is reported from parts of a few provinces. More rain is wanted in the western districts of the United Provinces and in parts of the Northwest Frontier Province.

France.—The acreage and yield of the principal grain crops and of potatoes for the years 1913, 1918 and 1919, as published by the French Department of Agriculture, are as follows:—

Crops.	1913.	1918.	1919.	1913.	1918.	1919.
	000 acres.	000 acres.	000 acres.	000 bush.	000 bush.	000 bush.
Wheat.....	16,166	10,993	11,316	319,373	225,738	177,980
Meslin.....	304	206	224	5,666	3,648	3,525
Rye.....	2,905	1,746	1,817	50,056	28,935	27,833
Barley.....	1,879	1,371	1,340	47,939	27,475	23,626
Buckwheat.....	1,116	769	745	26,016	10,159	12,288
Oats.....	9,833	6,721	6,815	336,049	166,123	158,404
Corn.....	1,133	754	740	21,380	9,760	11,773
Potatoes.....	3,825	2,940	3,041	499,198	239,559	285,260

The numbers of farm live stock as recorded on December 31, 1917 and 1918, with the corresponding numbers of 1913, are as follows:—

Description.	1913.	1917.	1918.	Description.	1913.	1917.	1918.
Horses.....	3,222,080	2,303,400	2,232,930	Sheep.....	16,131,390	9,881,870	9,061,110
Mules.....	188,280	143,990	139,070	Swine.....	7,035,850	4,165,400	4,377,020
Asses.....	356,310	318,960	311,890	Goats.....	1,434,970	1,160,990	1,197,490
Cattle.....	14,787,710	12,241,981	12,250,820				

The areas sown in France to winter cereals for 1920, as compared with 1919, have been reported by the French Department of Agriculture as follows:—

Crop.	1919.	1920.	Crop.	1919.	1920.
	acres.	acres.		acres.	acres.
Wheat.....	11,087,000	11,369,000	Barley.....	256,000	346,000
Meslin.....	204,000	229,000	Oats.....	1,652,000	1,833,000
Rye.....	1,814,000	1,959,000			

The total area under winter cereals is 724,000 acres more than in 1919. Wheat shows a net increase of about 282,000 acres. In the central and southern districts the area under winter wheat is considerably less than in 1920, but large increases are shown in the northern, eastern and western districts, due to their liberation from the effects of the war. The condition of the winter crops on March 1, 1920, as compared with February 1, 1920, and March 1, 1919, is officially reported as follows:—

Crops.	March 1, 1920.	February 1, 1920.	March 1, 1919.
Wheat.....	72	70	69
Meslin.....	73	70	69
Rye.....	74	72	70
Barley.....	72	70	70
Oats.....	73	70	68

In the French crop reporting system 100 signifies very good, 80 good, and 60 fairly good.

Rumania.—Broomhall states (March 23) that the latest news confirms indications of large sowings of spring cereals such as maize, barley, oats and millet. It is generally thought that the Government will authorize exports of maize before very long in order to improve the exchange, but no exports of wheat are expected, as the acreage of this crop is small.

United States.—The Crop-Reporting Board of the United States Department of Agriculture estimated (March 8) that the amounts of grain in farmers' hands on March 1, 1920, as compared with previous years, were approximately in thousands of bushels as follows:—

Grain.	In farmers' hands, March 1, 1917	Per cent of 1916 crop.	In farmers' hands, March 1, 1918.	Per cent of 1917 crop.	In farmers' hands, March 1, 1919.	Per cent of 1918 crop.	In farmers' hands, March 1, 1920.	Per cent of 1919 crop.
	000 bush.	p.c.	000 bush.	p.c.	000 bush.	p.c.	000 bush.	p.c.
Wheat.....	100,650	15.8	107,745	16.9	128,703	14.0	165,539	17.6
Corn.....	782,303	30.5	1,253,290	40.9	855,269	34.2	1,092,095	37.4
Oats.....	394,211	31.5	599,208	37.6	590,251	38.4	422,815	33.9
Barley.....	33,244	18.2	44,419	21.0	81,746	31.9	38,010	22.9

The following statement compares the prices of these crops on March 1, 1920, with those on March 1, 1917, 1918 and 1919:

Crop.	March 1, 1917.	March 1, 1918.	March 1, 1919.	March 1, 1920.
	\$ c.	\$ c.	\$ c.	\$ c.
Wheat.....	1 64	2 03	2 08	2 27
Corn.....	1 01	1 54	1 37	1 49
Oats.....	0 57	0 86	0 63	0 85
Barley.....	0 97	1 61	0 85	1 29

FIELD CROPS OF THE UNITED STATES, 1919.

The U.S. Monthly Crop Reporter of December, 1919, contained the following estimates of the acreage, production and value of the principal farm crops in the United States for the years 1918 and 1919, as compared with the annual average for the five years 1913-1917.

Field Crops.	Area.	Production.		Farm Value, December 1.	
		Per acre.	Total.	Per acre.	Total.
	000 acres.	bush.	000 bush.	cents.	\$
Corn.....1918	104,467	24.0	2,502,665	136.5	3,416,240
.....1919	102,075	28.6	2,917,450	134.9	3,934,234
Average, 1913-17.....	107,496	25.6	2,749,349	82.5	2,267,560
Winter wheat.....1918	37,130	15.2	565,099	206.3	1,165,995
.....1919	49,905	14.7	731,636	211.0	1,543,452
Average, 1913-17.....	34,196	16.2	555,190	121.3	673,382

Field Crops.		Area.	Production.		Farm Value, December 1.	
			Per acre.	Total.	Per acre.	Total.
		000 acres.	bush.	000 bush.	cents.	000 \$
Spring wheat.....	1918	22,051	16.2	356,339	200.9	715,831
	1919	23,338	9.0	209,351	229.5	480,556
Average, 1913-17.....		18,124	13.0	235,444	115.7	272,455
All wheat.....	1918	59,181	15.6	921,438	204.2	1,881,826
	1919	73,243	12.8	940,987	215.1	2,024,008
Average, 1913-17.....		52,320	15.1	790,634	119.6	945,837
Oats.....	1918	44,349	34.7	1,538,124	70.9	1,090,322
	1919	42,400	29.4	1,248,310	71.7	895,603
Average, 1913-17.....		40,583	32.8	1,331,287	48.3	643,187
Barley.....	1918	9,740	26.3	256,225	91.7	234,942
	1919	7,420	22.3	165,719	120.9	200,419
Average, 1913-17.....		7,780	25.6	199,212	72.4	144,242
Rye.....	1918	6,391	14.2	91,041	151.6	138,038
	1919	7,063	12.5	88,478	134.5	119,041
Average, 1913-17.....		3,151	15.9	50,001	109.0	54,489
Buckwheat.....	1918	1,027	16.5	16,905	166.5	28,142
	1919	790	20.6	16,301	147.4	24,026
Average, 1913-17.....		824	17.8	14,691	100.7	14,792
Flaxseed.....	1918	1,910	7.0	13,369	340.1	45,470
	1919	1,683	5.3	8,919	438.9	39,145
Average, 1913-17.....		1,756	7.9	13,818	182.2	25,170
Rice.....	1918	1,119	34.5	38,606	191.8	74,042
	1919	1,090	37.7	41,059	267.0	109,613
Average, 1913-17.....		835	36.9	30,788	112.0	34,468
Potatoes.....	1918	4,295	95.9	411,860	119.3	491,527
	1919	4,013	89.2	357,901	161.4	577,581
Average, 1913-17.....		3,812	96.0	366,046	88.0	322,292
Sweet potatoes.....	1918	940	93.5	87,924	135.2	118,863
	1919	1,029	100.7	103,579	133.3	138,085
Average, 1913-17.....		730	94.8	69,209	82.1	56,843
Hay.....	1918	55,755	1.37	76,660	\$20.13	1,543,494
	1918	56,348	1.62	91,326	20.15	1,839,967
Average, 1913-17.....		52,026	1.52	78,921	12.51	987,297
Sugar beets.....	1918	594	10.01	5,949	10.00	59,494
	1919	697	9.18	6,397	10.75	68,750
Average, 1913-17.....		601	10.05	6,038	6.07	36,642
Tobacco.....	1918	1,647	lb.	lb.	per lb.	
	1918	1,901	873.7	1,439,071	28.0	402,264
	1919	1,901	730.8	1,389,458	39.0	542,547
Average, 1913-17.....		1,348	809.1	1,090,641	14.5	158,059

The values are based on the prices paid to farmers on December 1, 1919.

Value of Farm Products in the United States.—The U.S. Monthly Crop Reporter for January, 1920, estimates the total gross value of farm products for the year 1919 (preliminary estimate) at \$24,982,000,000, of which \$16,025,000,000, or 64.1 p.c., are for

crops and \$8,957,000,000, or 35.9 p.c., are for animals and animal products. The corresponding figures for 1918 are \$22,480,000,000, of which \$14,331,000,000, or 63.8 p.c., were for crops and \$8,149,000,000, or 36.2, were for animals and animal products.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

The following table, taken from the "International Crop Report and Agricultural Statistics" for March, 1920, shows the area and yield of the principal cereals and of potatoes for all countries from which complete statistics of the last seven years have been received. In the case of wheat, barley, oats and flaxseed the data for 1919 and preceding years in the northern hemisphere have been added to the respective data for 1919-20 and preceding years in the southern hemisphere. For rye, corn and potatoes the totals relate only to countries in the northern hemisphere.

Area and Yield of Cereals and Potatoes in Various Countries of the World, 1918 and 1919.

Countries.	1918 and 1918-19.	1919 and 1919-20.	Average 1913 to 1917 and 1913-14 to 1917-18.	Per cent of 1918 and 1913 -19.	Per cent of aver- age.	1918 and 1918-19.	1919 and 1919-20.	Average 1913 to 1917 and 1913-14 to 1917-18.	Per cent of 1918 and 1918 -19.	Per cent of aver- age.
	000 acres.	000 acres.	000 acres.	p.c.	p.c.	000 bush.	000 bush.	000 bush.	p.c.	p.c.
Wheat.....	187,493	185,913	175,945	99.2	105.7	2,567,231	2,408,362	2,496,400	93.8	96.5
Rye.....	15,426	16,145	12,545	104.7	128.7	243,456	251,277	231,811	103.2	108.4
Barley.....	31,049	27,728	29,058	89.3	95.4	752,946	611,120	694,693	81.2	88.0
Oats.....	83,913	80,658	77,244	96.1	104.4	2,624,432	2,298,604	2,521,551	87.6	91.2
Corn.....	114,451	112,837	118,948	98.6	94.4	2,652,870	3,159,212	3,017,421	119.1	104.7
Flaxseed.....	10,598	8,531	10,276	80.5	83.0	69,931	67,732	72,204	96.9	93.8
Potatoes.....	12,081	11,771	11,602	97.4	101.5	1,491,578	1,396,047	1,489,065	93.6	93.8

NOTE.—The number of countries represented in the above table are as follows: Wheat, 23; rye, 13; barley, 20; oats, 20; corn, 7; flaxseed, 9; potatoes, 12.

The countries for which the above totals are given represent the following percentages for each crop: Wheat 60, rye 14, barley 42, oats 60, corn 78, flaxseed 80 and potatoes 30.

AGRICULTURAL WEALTH OF CANADA.

The accompanying table presents the results of calculations of the gross total value of the annual agricultural production of Canada for each of the years 1915 to 1919. The values are calculated from the average prices received by farmers. They are necessarily gross values, because it is impossible to distinguish between the use of crops as materials for other kinds of production such as the feeding of live stock, nor to allow for the costs of production.

Gross Value of the Annual Agricultural Production of Canada, 1915-19.

Description.	1915	1916	1917	1918	1919
	000 \$	000 \$	000 \$	000 \$	000 \$
Field crops.....	825,371	886,495	1,144,637	1,372,936	1,452,437
Farm animals.....	73,958	110,201	156,569	191,129	180,084
Wool.....	3,360	4,440	7,000	12,400	11,000
Dairy products.....	146,005	152,816	232,822	248,908	252,320
Fruits and vegetables.....	35,000	35,000	40,000	40,000	40,000
Poultry and eggs.....	35,000	35,000	40,000	40,000	40,000
Gross total value.....	1,118,694	1,223,952	1,621,028	1,905,373	1,975,841

If to the estimated value of agricultural production in 1919, viz., \$1,975,841,000, be added for land \$2,792,229,000, for buildings \$927,548,000, for implements \$387,079,000 and for farm live stock \$1,296,602,000, the total estimated agricultural wealth of the Dominion of Canada for 1919 amounts to \$7,379,299,000.

INSPECTION AND SHIPMENTS OF GRAIN, 1919.

The number of cars and total shipments of grain inspected at Winnipeg and other points in the Western Division for the four months ended December 31, 1919, as compared with the corresponding periods in 1916, 1917 and 1918, were as follows:—

Grain.	Four months ended Dec. 31, 1916.		Four months ended Dec. 31, 1917.		Four months ended Dec. 31, 1918.		Four months ended Dec. 31, 1919.	
	cars.	bushels.	cars.	bushels.	cars.	bushels.	cars.	bushels.
Wheat.....	84,247	101,096,400	90,390	103,948,500	74,574	93,217,500	63,596	77,905,100
Oats.....	20,018	41,036,900	12,440	24,268,000	6,339	13,311,900	13,125	25,593,650
Barley.....	4,984	6,728,400	4,148	5,392,400	4,253	5,741,550	5,344	7,214,400
Flaxseed.....	2,608	2,999,200	2,366	2,602,600	1,364	1,364,000	1,099	1,099,000
Rye.....	98	98,000	298	298,000	716	787,600	1,100	1,265,000
Screenings...	188	188,000	430	430,000	300	300,000	266	266,000
Total.....	112,143	152,146,900	110,072	136,939,500	87,546	114,722,550	84,536	113,349,250

The shipments of grain from Fort William and Port Arthur for the four months ended December 31, 1916, 1917, 1918, and 1919, were as follows:—

Grain.	Four months ended Dec. 31, 1916.	Four months ended Dec. 31, 1917.	Four months ended Dec. 31, 1918.	Four months ended Dec. 31, 1919.
	bushels.	bushels.	bushels.	bushels.
Wheat.....	61,681,973	91,729,372	55,120,888	54,746,281
Oats.....	20,452,027	12,977,175	2,943,183	12,292,972
Barley.....	3,949,731	2,997,969	1,020,060	4,142,720
Flaxseed.....	2,503,243	1,928,487	758,060	546,371
Total.....	88,586,974	109,633,003	59,842,191	71,728,344

THE WEATHER DURING FEBRUARY.

The Dominion Meteorological Office reports that the temperature was from 1° to 4° below the average in the peninsula of Ontario, northward to the straits of Mackinaw, and eastward to near the boundary of the province. It was average over the southern portion of British Columbia, and elsewhere in the Dominion above the average. In the western provinces the positive departure was very marked, varying from 5° in Manitoba to as much as 13° in portions of Saskatchewan and Alberta. The precipitation in British Columbia was unusually light, being from 3 to 6 inches below the average on Vancouver Island and over the Lower Mainland respectively, and from 0.75 inch to 1.50 inch below in the Interior. In the western provinces it was below the average, except at one or two points, where there was a slight excess. The deficiency in many localities was equivalent to half of the normal amount. In Ontario also it was much below, except at a few scattered places, where the average was just exceeded. In Quebec, in the extreme western portion, there was less than usual, with a small excess over the large remainder of the province. In the Maritime Provinces it was everywhere exceeded, and, except in Cape Breton, to a large amount. At the close of the month, except over a large portion of British Columbia, the ground throughout the Dominion was snow-covered, the depth varying greatly in different localities.

WEATHER OF THE YEAR 1919.

Weather of the Year 1919 at Canadian Stations, compared with Normal Annual Averages for the Period 1888 to 1907.

Stations.	Degrees of Temperature F.						Hours of sunshine.	
	mean winter	mean summer	lowest in year	highest in year	mean annual	normal	1919	normal annual
British Columbia—								
Victoria.....	41.2	57.2	15.5	84.5	48.7	50.3	2,265	1,822
Vancouver.....	39.2	60.6	11.2	81.3	48.5	49.1	1,960	1,815
Kamloops.....	28.2	67.5	-21.0	102.3	46.1	47.4	2,223	1,868
Alberta—								
Calgary.....	20.8	62.5	-33.0	97.0	39.7	37.4	-	-
Edmonton.....	13.3	60.4	-39.0	89.0	35.5	36.7	2,163	2,081
Saskatchewan—								
Battleford.....	9.1	65.3	-50.0	103.0	35.5	34.4	-	2,101
Prince Albert.....	7.7	64.8	-46.0	95.0	34.4	32.1	-	-
Qu'Appelle.....	9.1	65.8	-50.0	94.0	35.2	34.5	2,524	-
Manitoba—								
Minnedosa.....	6.6	65.3	-41.2	98.0	34.0	34.1	-	-
Winnipeg.....	9.1	67.6	-30.3	95.0	36.4	34.9	2,128	2,178
Ontario—								
Port Arthur.....	17.1	63.7	-28.0	92.0	37.8	35.7	-	-
White River.....	11.3	62.0	-51.0	93.0	34.0	32.3	-	-
Parry Sound.....	23.8	69.4	-25.0	98.0	43.8	41.3	-	-
Southampton.....	28.0	67.8	-7.6	94.0	45.6	43.8	-	-
Toronto.....	30.5	71.2	-7.2	98.0	48.3	45.5	-	2,048
Kingston.....	27.7	69.7	-11.7	91.1	46.5	43.7	2,069	1,989
Stonecliffe.....	14.1	60.8	-28.0	98.0	34.7	38.5	1,860	-
Ottawa.....	22.3	69.8	-20.0	97.0	43.5	43.0	-	1,874

Weather of the Year 1919 at Canadian Stations, compared with Normal Annual Averages for the Period 1888 to 1907—con.

Stations.	Degrees of Temperature F.						Hours of sunshine.	
	mean winter	mean summer	low-est in year	high-est in year	mean annual	normal	1919	normal annual
Quebec—								
Montreal.....	23.1	68.6	-15.2	92.4	43.2	42.3	2,039	1,805
Quebec.....	19.6	65.8	-27.4	92.5	39.9	38.7	1,790	1,762
Sherbrooke.....	21.3	68.0	-21.3	93.0	41.9	-	1,669	1,843
Father Point.....	18.6	55.5	-22.0	84.0	35.3	35.1	1,648	-
New Brunswick—								
Chatham.....	22.3	63.7	-25.5	92.0	40.8	40.3	-	-
Fredericton.....	22.5	63.4	-26.0	92.5	41.0	40.5	1,908	-
St. John.....	27.1	58.6	-17.2	83.5	41.6	41.6	1,780	1,978
Nova Scotia—								
Yarmouth.....	32.6	59.2	- 0.7	83.0	44.3	43.8	-	-
Halifax.....	30.3	61.6	- 9.3	86.6	44.1	44.3	-	-
Sydney.....	29.3	60.7	- 5.0	84.0	41.1	42.4	-	-
Prince Edward Island—								
Charlottetown.....	26.3	62.4	-12.0	82.0	42.2	42.0	1,554	1,896

Precipitation in inches.

Stations.	1919.			Normal.		
	rain.	snow.	total.	rain.	snow.	total.
British Columbia—						
Victoria.....	28.29	0.4	28.33	31.41	11.6	32.57
Vancouver.....	54.01	31.9	57.20	57.88	23.2	60.20
Kamloops.....	5.88	40.7	9.95	8.0	26.2	10.62
Alberta—						
Calgary.....	8.35	36.3	11.98	11.70	46.0	16.30
Edmonton.....	8.91	75.2	16.43	14.18	40.2	18.20
Saskatchewan—						
Battleford.....	6.97	32.9	10.26	11.05	27.4	13.79
Prince Albert.....	11.70	36.8	15.38	11.62	49.8	16.60
Qu'Appelle.....	11.46	64.6	17.92	13.44	54.0	18.84
Manitoba—						
Minnedosa.....	11.28	45.8	15.86	12.77	45.7	17.36
Winnipeg.....	18.34	67.9	25.13	15.62	51.9	20.81
Ontario—						
Port Arthur.....	14.68	34.6	18.14	19.01	44.5	23.46
White River.....	22.12	83.7	30.49	17.36	93.5	26.71
Parry Sound.....	29.78	110.5	40.83	29.38	115.6	40.94
Southampton.....	20.95	84.8	29.43	21.64	116.0	33.24
Toronto.....	26.79	28.7	29.66	25.28	61.0	31.38
Kingston.....	30.91	40.7	34.98	24.01	74.8	31.49
Stonecliffe.....	30.24	44.8	34.72	21.60	82.6	29.95
Ottawa.....	26.63	80.4	34.67	24.70	87.0	33.40
Quebec—						
Montreal.....	29.88	104.9	40.37	29.37	122.7	41.64
Quebec.....	31.55	115.9	43.14	27.17	132.9	40.46
Sherbrooke.....	25.30	87.4	34.04	27.19	116.7	38.86
Father Point.....	17.34	124.7	29.81	23.21	109.6	34.07
New Brunswick—						
Chatham.....	26.13	98.2	35.95	27.65	119.9	39.64
Fredericton.....	35.60	77.1	43.31	33.73	104.6	44.19
St. John.....	42.12	60.2	48.14	36.68	84.3	45.11
Nova Scotia—						
Yarmouth.....	52.98	31.9	56.17	42.46	84.2	50.88
Halifax.....	52.96	35.6	56.52	49.43	76.7	57.10
Sydney.....	42.53	79.0	50.33	41.10	92.8	50.38
Prince Edward Island—						
Charlottetown.....	37.02	61.1	43.13	29.97	101.8	40.15

PRICES OF AGRICULTURAL PRODUCE, 1920.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

(Furnished by the Board of Grain Commissioners for Canada.)

Grain and grade.	Feb. 7.		Feb. 14.		Feb. 21.		Feb. 28.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
No. 1 hard.....	2 15	—	2 15	—	2 15	—	2 15	—
No. 1 Nor.....	2 15	—	2 15	—	2 15	—	2 15	—
No. 2 Nor.....	2 12	—	2 12	—	2 12	—	2 12	—
No. 3 Nor.....	2 08	—	2 08	—	2 08	—	2 08	—
No. 4 special.....	2 02	—	2 02	—	2 02	—	2 02	—
No. 5 special.....	1 91	—	1 91	—	1 91	—	1 91	—
No. 6 special.....	1 81	—	1 81	—	1 81	—	1 81	—
Feed.....	1 71	—	1 71	—	1 71	—	1 71	—
Oats—								
No. 2 C.W.....	0 90½—0 95½		0 91—0 96½		0 96½—0 98		0 94½—0 97½	
No. 3 C.W.....	0 87½—0 93½		0 88½—0 93½		0 93½—0 94½		0 90½—0 95½	
No. 1 feed ex.....	0 87½—0 93½		0 88½—0 93½		0 93½—0 94½		0 90½—0 93½	
No. 1 feed.....	0 83½—0 89½		0 84½—0 91½		0 91½—0 93½		0 89½—0 92½	
No. 2 feed.....	0 82½—0 87½		0 82½—0 88½		0 89½—0 91½		0 88½—0 91½	
Barley—								
No. 3 C.W.....	1 65—1 82½		1 64½—1 75½		1 70½—1 77½		1 68—1 71½	
No. 4 C.W.....	1 36½—1 49½		1 34½—1 45½		1 44½—1 48		1 42—1 45½	
Rejected.....	1 24—1 24½		1 23½—1 35½		1 33½—1 37½		1 30½—1 31½	
Feed.....	1 24—1 24½		1 23½—1 35½		1 33½—1 37½		1 30½—1 31½	
Flax—								
No. 1 N.W.C.....	4 95—5 20		5 02—5 21½		5 18—5 25½		5 16½—5 40	
No. 2 C.W.....	4 69—4 98		4 76—4 95½		4 86—5 00½		4 91½—5 05	
No. 3 C.W.....	4 35—4 64		4 42—4 61½		4 51—4 65½		4 56½—4 70	

II. Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1919-20.

(From the Monthly Crop Report of the United States Department of Agriculture.)

Grade and Market.	November.		December.		January.		February.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red Winter, No. 2—								
St. Louis.....	2 24	—2 41	2 40	—2 50	2 60	—2 84	2 40	—2 77
Chicago.....	2 24	—2 37½	2 38½	—2 47	2 50	—2 71	2 38	—2 66
New York (f.o.b. afloat).....	2 38	—	2 75	—2 80	2 65	—	2 60	—
Corn, No. 2, mixed—								
St. Louis.....	1 44	—1 64	1 50	—1 55	1 50	—1 —	1 44	—
Corn No. 2—								
Chicago.....	1 37	—1 66	1 42	—1 60	1 42	—1 58½	1 33	—1 56
Oats, No. 2—								
St. Louis.....	0 70	—0 77	0 78	—0 86½	0 84½	—0 92	0 82	—0 91½
Chicago.....	0 71½	—0 80	0 75	—0 85½	0 84½	—0 91½	0 80	—0 92
Rye No. 2—								
Chicago.....	1 33½	—1 50½	1 50	—1 82	1 66	—1 85½	1 44	—1 68½

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Canada Statistics, Bureau of



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OTTAWA

J. DE LABROQUERIE TACHÉ

Printer to the King's Most Excellent Majesty

1920

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DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

STOCKS ON HAND AND QUALITY OF CROPS OF 1919.

Report for the month ended March 31, 1920.

The following report gives the results of inquiries as to (a) the stocks of agricultural produce remaining in farmers' hands on March 31, 1920, and (b) the proportion of the crops of 1919 that proved to be of merchantable quality.

STOCKS IN FARMERS' HANDS ON MARCH 31, 1920.

The reports of crop correspondents show that of the total wheat production of 1919, 18 p.c., or 34,837,000 bushels remained in farmers' hands on March 31, 1920. Last year the proportion was 17 p.c., representing 32,315,000 bushels, and in 1918 it was 14 p.c., representing nearly 32 million bushels. Of the other field crops, the proportions and quantities estimated to be in farmers' hands on March 31, 1920, are as follows: Oats 31 p.c., or 123,090,000 bushels; barley 20 p.c., or 11,024,000 bushels; rye 19 p.c., or 1,936,400 bushels; buckwheat 18 p.c., or 1,951,000 bushels; corn for husking 14 p.c., or 2,353,000 bushels; flaxseed 26 p.c., or 1,400,500 bushels; potatoes 25 p.c., or 31,646,000 bushels; turnips, etc. 10 p.c., or 11,317,000 bushels; hay and clover 20 p.c., or 3,217,000 tons. The stock of potatoes, viz., 31,646,000 bushels, compares with 32,836,000 bushels last year and 24,130,500 bushels in 1918.

MERCHANTABLE QUALITY OF CROPS OF 1919.

The returns show that of the total wheat crop of 1919, viz., 193,260,400 bushels, 94 p.c., or 182,430,000 bushels, were of merchantable quality. Last year the proportion was estimated at 93 p.c., and in 1918 it was 95 p.c. The proportions per cent. of other crops of 1919 estimated to be of merchantable quality were as follows, the corresponding percentages for 1918 being given in brackets: Oats 90 (90); barley 89 (92); rye 94 (92); buckwheat 83 (75); corn for husking 80 (67); flaxseed 93 (90); potatoes 77 (81); turnips, etc. 83 (86); hay and clover 90 (89).

I.—Produce in Farmers' Hands on March 31, 1920, and Quantities of Merchantable Quality, 1919.

Field Crops.	Total production in 1919.	In farmers' hands March 31, 1920.		Yield of 1919 harvest merchantable.	
	bush.	p.c.	bush.	p.c.	bush.
Canada—					
Wheat.....	193,260,400	18	34,837,000	94	182,430,000
Oats.....	394,387,000	31	123,090,000	90	353,960,000
Barley.....	56,389,400	20	11,024,000	89	50,267,000
Rye.....	10,207,400	19	1,936,400	94	9,583,000
Buckwheat.....	10,550,800	18	1,951,000	83	8,809,000
Flax.....	5,472,800	26	1,400,500	93	5,097,000
Corn for husking.....	16,940,500	14	2,353,000	80	13,472,000
Potatoes.....	125,574,900	25	31,646,000	77	96,524,000
Turnips, etc.....	112,288,600	10	11,317,000	83	93,117,000
	tons.		tons.		tons.
Hay and clover.....	16,348,000	20	3,217,000	90	14,781,000
Prince Edward Island—					
Wheat.....	624,600	35	219,000	92	575,000
Oats.....	6,038,000	38	2,294,000	94	5,676,000
Barley.....	164,000	24	39,000	92	151,000
Buckwheat.....	87,800	27	24,000	83	73,000
Potatoes.....	4,529,000	32	1,449,000	75	3,397,000
Turnips, etc.....	6,396,000	10	640,000	82	5,245,000
	tons.		tons.		tons.
Hay and clover.....	428,000	30	128,000	95	407,000
Nova Scotia—					
Wheat.....	564,000	25	141,000	92	519,000
Oats.....	5,718,000	32	1,830,000	92	5,261,000
Barley.....	434,000	17	74,000	91	395,000
Rye.....	31,000	11	3,400	90	28,000
Buckwheat.....	439,000	16	70,000	83	364,000
Potatoes.....	9,992,000	25	2,498,000	74	7,394,000
Turnips, etc.....	16,289,000	11	1,792,000	84	13,683,000
	tons.		tons.		tons.
Hay and clover.....	1,425,000	16	228,000	93	1,325,000
New Brunswick—					
Wheat.....	623,000	24	150,000	92	573,000
Oats.....	9,261,000	33	3,056,000	92	8,520,000
Barley.....	285,000	18	51,000	88	251,000
Rye.....	7,000	10	700	100	7,000
Buckwheat.....	1,871,000	23	430,000	88	1,646,000
Potatoes.....	10,790,200	22	2,374,000	71	7,661,000
Turnips, etc.....	8,898,800	11	979,000	84	7,475,000
	tons.		tons.		tons.
Hay and clover.....	1,111,000	18	200,000	86	955,000
Quebec—					
Wheat.....	4,206,000	20	841,000	86	3,617,000
Oats.....	57,275,000	29	16,610,000	88	50,402,000
Barley.....	5,344,000	16	855,000	89	4,756,000
Rye.....	578,000	16	92,000	88	509,000
Buckwheat.....	4,081,000	17	694,000	84	3,428,000
Flax.....	111,000	18	20,000	84	93,000
Corn for husking.....	1,788,000	13	232,000	84	1,502,000
Potatoes.....	57,280,000	26	14,893,000	77	44,106,000
Turnips, etc.....	27,780,000	10	2,778,000	88	24,446,000
	tons.		tons.		tons.
Hay and clover.....	3,449,000	22	1,419,000	90	5,804,000

I.—Produce in Farmers' Hands on March 31, 1920, and Quantities of Merchantable Quality, 1919—con.

Field Crops.	Total production in 1919.	In farmers' hands March 31, 1920.		Yield of 1919 harvest merchantable.	
	bush	n.e.	bush	n.e.	bush
Ontario—					
Wheat.....	20,698,500	16	3,312,000	83	17,180,000
Oats.....	78,388,000	26	20,381,000	81	63,494,000
Barley.....	13,134,000	18	2,364,000	82	10,770,000
Rye.....	2,219,000	12	266,000	86	1,908,000
Buckwheat.....	4,072,000	18	733,000	81	3,298,000
Flax.....	129,500	5	6,500	88	114,000
Corn for husking.....	15,152,500	14	2,121,000	79	11,970,000
Potatoes.....	15,145,000	23	3,483,000	79	11,965,000
Turnips, etc.....	42,756,000	10	4,276,000	79	33,777,000
	tons.		tons.		tons.
Hay and clover.....	5,589,000	19	1,062,000	90	5,030,000
Manitoba—					
	bush.		bush.		bush.
Wheat.....	40,975,300	13	5,327,000	97	39,746,000
Oats.....	57,698,000	33	19,040,000	94	54,236,000
Barley.....	17,149,400	19	3,258,000	89	15,263,000
Rye.....	4,089,400	16	654,000	95	3,885,000
Flax.....	520,300	14	73,000	97	505,000
Potatoes.....	5,287,500	24	1,269,000	80	4,230,000
Turnips, etc.....	1,113,000	10	111,000	84	935,000
	tons.		tons.		tons.
Hay and clover.....	401,400	20	80,000	94	377,000
Saskatchewan—					
	bush.		bush.		bush.
Wheat.....	89,994,000	21	18,899,000	96	86,394,000
Oats.....	112,157,000	38	42,620,000	92	103,184,000
Barley.....	8,971,000	25	2,243,000	95	8,522,000
Rye.....	2,000,000	30	600,000	100	2,000,000
Flax.....	4,490,000	27	1,212,000	93	4,176,000
Potatoes.....	11,250,000	30	3,375,000	84	9,450,000
Turnips, etc.....	3,591,000	3	108,000	88	3,160,000
	tons.		tons.		tons.
Hay and clover.....	279,000	16	45,000	94	262,000
Alberta—					
	bush.		bush.		bush.
Wheat.....	34,575,000	17	5,878,000	95	32,846,000
Oats.....	65,725,000	26	17,089,000	93	61,124,000
Barley.....	10,562,000	20	2,112,000	93	9,823,000
Rye.....	1,173,000	27	317,000	97	1,138,000
Flax.....	222,000	40	89,000	94	209,000
Potatoes.....	8,241,200	25	2,060,000	72	5,934,000
Turnips, etc.....	2,768,800	17	471,000	75	2,077,000
	tons.		tons.		tons.
Hay and clover.....	476,600	8	38,000	92	438,000
British Columbia—					
	bush.		bush.		bush.
Wheat.....	1,000,000	7	70,000	98	980,000
Oats.....	2,127,000	8	170,000	97	2,063,000
Barley.....	346,000	8	28,000	97	336,000
Rye.....	110,000	3	3,300	98	108,000
Potatoes.....	3,060,000	8	245,000	78	2,387,000
Turnips, etc.....	2,696,000	6	162,000	86	2,319,000
	tons.		tons.		tons.
Hay and clover.....	189,000	9	17,000	97	183,000

II. Produce in Farmers' Hands on March 31, 1917-1920.

Field Crops.	Per cent of total yield on hand.				In farmers' hands on March 31.			
	1917	1918	1919	1920	1917	1918	1919	1920
	p.c.	p.c.	p.c.	p.c.	bush.	bush.	bush.	bush.
Canada—								
Wheat.....	21	14	17	18	54,938,000	31,684,700	32,315,000	34,837,000
Oats.....	39	31	33	31	162,089,000	123,910,400	141,694,000	123,090,000
Barley.....	26	20	26	20	10,997,000	10,944,600	20,026,000	11,024,000
Rye.....	28	13	21	19	820,500	491,800	1,784,000	1,936,400
Buckwheat.....	18	18	23	18	1,103,000	1,251,500	2,561,000	1,951,000
Corn for husking..	13	12	21	14	814,000	937,000	3,019,000	2,353,000
Flaxseed.....	20	9	17	26	1,636,000	515,800	1,039,000	1,400,500
Potatoes.....	26	30	36	25	16,770,000	24,130,500	32,836,000	31,646,000
Turnips, etc.....	14	14	18	10	4,932,000	8,644,100	22,295,000	11,317,000
					tons.	tons.	tons.	tons.
Hay and clover...	32	26	18	20	4,719,000	3,536,300	2,701,000	3 217,000
P.E. Island—					bush.	bush.	bush.	bush.
Wheat.....	28	28	40	35	162,000	146,200	242,000	219,000
Oats.....	38	37	40	38	2,817,000	2,398,500	2,336,000	2,294,000
Barley.....	25	27	32	24	26,000	26,900	52,000	39,000
Buckwheat.....	21	24	29	27	14,000	17,400	35,000	24,000
Potatoes.....	29	40	38	32	1,852,000	2,450,000	2,038,000	1,449,000
Turnips, etc.....	15	14	13	10	572,000	573,200	558,000	640,000
					tons.	tons.	tons.	tons.
Hay and clover...	27	25	23	30	91,000	76,400	77,000	128,000
Nova Scotia—					bush.	bush.	bush.	bush.
Wheat.....	19	17	25	25	50,000	43,400	182,000	141,000
Oats.....	23	22	29	32	927,000	791,500	1,567,000	1,830,000
Barley.....	17	16	22	17	21,000	19,000	76,000	74,000
Rye.....	10	18	14	11	500	800	1,000	3,400
Buckwheat.....	14	13	17	16	34,000	29,800	76,000	70,000
Potatoes.....	24	33	25	25	1,664,000	2,367,000	2,444,000	2,498,000
Turnips, etc.....	13	15	13	11	473,000	479,000	1,212,000	1,792,000
					tons.	tons.	tons.	tons.
Hay and clover...	26	19	17	16	259,000	169,900	149,000	228,000
New Brunswick—					bush.	bush.	bush.	bush.
Wheat.....	21	22	23	24	51,000	42,400	216,000	150,000
Oats.....	30	27	31	33	1,812,000	1 154 300	2,186,000	3,056,000
Barley.....	19	20	23	18	9,000	7,900	38,000	51,000
Rye.....	—	—	—	10	—	—	—	700
Buckwheat.....	21	20	27	23	253,000	222,300	405,000	430,000
Potatoes.....	24	34	26	22	1,797,000	2,342,900	2,360,000	2,374,000
Turnips, etc.....	15	16	13	11	475,000	370,200	842,000	979,000
					tons.	tons.	tons.	tons.
Hay and clover...	29	21	16	18	247,000	190,900	178,000	200,000
Quebec—					bush.	bush.	bush.	bush.
Wheat.....	18	16	24	20	173,000	621,400	1,514,000	841,000
Oats.....	27	23	30	29	6,591,000	7,467,200	15,800,000	16,610,000
Barley.....	19	14	18	16	277,000	428,900	819,000	855,000
Rye.....	20	9	17	16	24,000	33,800	80,000	92,000
Buckwheat.....	18	15	19	17	345,000	404,900	895,000	694,000
Corn for husking..	12	9	13	13	39,000	162,200	156,000	232,000
Flaxseed.....	18	9	21	18	1,000	4,200	17,000	20,000
Potatoes.....	23	23	31	26	3,375,000	4,176,300	12,070,000	14,893,000
Turnips, etc.....	12	9	10	10	318,000	1,418,300	2,823,000	2,778,000
					tons.	tons.	tons.	tons.
Hay and clover...	39	29	19	22	2,037,000	1,468,900	1,292,000	1,419,000

II. Produce in Farmers' Hands on March 31, 1917-1920—concluded.

Field Crops.	Per cent of total yield on hand.				In farmers' hands on March 31.			
	1917	1918	1919	1920	1917	1918	1919	1920
	p.c.	p.c.	p.c.	p.c.	bush.	bush.	bush.	bush.
Ontario—								
Wheat.....	17	17	23	16	3,048,000	2,774,100	3,505,000	3,312,000
Oats.....	28	32	33	26	14,216,000	31,384,200	43,478,000	20,381,000
Barley.....	19	22	29	18	1,425,000	2,462,000	7,032,000	2,364,000
Rye.....	16	13	19	12	193,000	156,900	344,000	266,000
Buckwheat.....	18	19	25	18	457,000	577,100	1,150,000	733,000
Corn for husking..	13	13	22	14	775,000	774,800	2,863,000	2,121,000
Flaxseed.....	8	11	26	5	34,000	5,700	51,000	6,500
Potatoes.....	19	32	36	23	1,541,000	6,073,900	6,975,000	3,483,000
Turnips, etc.....	13	15	16	10	2,661,000	4,807,000	10,383,000	4,276,000
					tons.	tons.	tons.	tons.
Hay and clover...	31	27	18	19	1,897,000	1,376,200	827,000	1,062,000
Manitoba—					bush.	bush.	bush.	bush.
Wheat.....	16	14	14	13	4,747,000	5,745,690	6,747,000	5,327,000
Oats.....	39	30	36	33	18,891,000	13,612,500	19,610,000	19,040,000
Barley.....	22	18	27	19	3,020,000	2,867,400	7,550,000	3,258,000
Rye.....	39	12	19	16	217,000	76,600	748,000	654,000
Flaxseed.....	15	8	19	14	31,000	11,700	207,000	73,000
Potatoes.....	35	28	38	24	1,648,000	1,020,000	3,164,000	1,269,000
Turnips, etc.....	8	10	15	10	36,000	46,300	374,000	111,000
					tons.	tons.	tons.	tons.
Hay and clover...	33	25	20	20	47,000	18,800	15,000	80,000
Saskatchewan—					bush.	bush.	bush.	bush.
Wheat.....	21	13	16	21	30,987,000	15,329,800	14,799,000	18,899,000
Oats.....	45	35	38	38	73,475,000	43,124,800	40,756,000	42,620,000
Barley.....	33	23	23	25	3,272,000	3,235,600	2,734,000	2,243,000
Rye.....	48	12	32	30	263,000	109,800	454,000	600,000
Flaxseed.....	18	8	18	27	1,205,000	376,800	577,000	1,212,000
Potatoes.....	37	30	32	30	2,708,000	2,703,000	2,224,000	3,375,000
Turnips, etc.....	24	16	12	3	98,000	276,300	264,000	108,000
					tons.	tons.	tons.	tons.
Hay and clover...	28	23	26	16	16,500	85,000	94,000	45,000
Alberta—					bush.	bush.	bush.	bush.
Wheat.....	24	13	21	17	15,621,000	6,889,000	4,988,000	5,878,000
Oats.....	42	27	26	26	42,924,000	23,297,900	15,682,000	17,089,000
Barley.....	30	18	22	20	2,932,000	1,869,500	1,706,000	2,112,000
Rye.....	28	18	19	27	123,000	113,900	157,000	317,000
Flaxseed.....	28	12	39	40	365,000	117,400	187,000	89,000
Potatoes.....	36	31	27	25	1,722,000	2,296,800	842,000	2,060,000
Turnips, etc.....	24	22	39	17	114,000	499,800	919,000	471,000
					tons.	tons.	tons.	tons.
Hay and clover...	22	15	13	8	73,500	109,600	52,000	38,000
British Columbia—					bush.	bush.	bush.	bush.
Wheat.....	20	15	15	7	99,000	92,800	122,000	70,000
Oats.....	12	21	18	8	436,000	679,500	279,000	170,000
Barley.....	12	17	9	8	15,000	27,400	19,000	28,000
Rye.....	-	-	-	3	-	-	-	3,300
Potatoes.....	16	28	21	8	463,000	700,600	719,000	245,000
Turnips, etc.....	10	11	7	6	185,000	174,000	170,000	162,000
					tons.	tons.	tons.	tons.
Hay and clover...	11	17	8	9	51,000	40,600	17,000	17,000

III. Produce of Merchantable Quality, 1916-1919.

Field Crops.	Per cent of total yield merchantable.				Yield of harvest merchantable.			
	1916	1917	1918	1919	1916	1917	1918	1919
	p.c.	p.c.	p.c.	p.c.	bush.	bush.	bush.	bush.
Canada—								
Wheat.....	85	95	93	94	223,643,000	223,007,000	175,370,000	182,430,000
Oats.....	89	91	90	90	367,271,000	366,610,300	382,994,000	353,960,000
Barley.....	84	90	92	89	35,666,700	49,532,100	71,171,000	50,267,000
Rye.....	92	89	92	94	2,646,000	3,447,500	7,827,000	9,583,000
Buckwheat.....	78	76	75	83	4,606,000	5,426,100	8,566,000	8,809,000
Corn for husking..	58	50	67	80	3,648,000	3,914,800	9,489,000	13,472,000
Flaxseed.....	93	89	90	93	7,642,600	5,272,800	5,440,000	5,097,000
Potatoes.....	78	77	81	77	49,691,500	61,767,200	84,359,000	96,524,000
Turnips, etc.....	75	83	86	83	27,461,000	52,710,500	104,890,000	93,117,000
					tons.	tons.	tons.	tons.
Hay and clover...	90	87	89	90	13,617,000	11,923,600	13,141,000	14,781,000
P.E. Island—								
Wheat.....	86	71	91	92	497,000	370,600	551,000	575,000
Oats.....	94	87	92	94	6,968,000	5,639,600	5,372,000	5,676,000
Barley.....	93	92	95	92	98,000	91,800	154,000	151,000
Buckwheat.....	87	86	89	83	59,000	62,000	109,000	73,000
Potatoes.....	81	79	76	75	5,173,000	4,838,800	4,075,000	3,397,000
Turnips, etc.....	84	78	79	82	3,205,000	3,193,300	3,391,000	5,245,000
					tons.	tons.	tons.	tons.
Hay and clover...	93	92	95	95	314,000	281,000	317,000	407,000
Nova Scotia—								
Wheat.....	87	78	88	92	227,000	119,000	641,000	519,000
Oats.....	89	96	88	92	3,588,000	3,453,900	4,755,000	5,261,000
Barley.....	88	80	89	91	108,000	95,000	309,000	395,000
Rye.....	94	92	81	90	5,000	4,100	6,000	28,000
Buckwheat.....	83	79	77	83	203,000	180,800	343,000	364,000
Potatoes.....	82	77	77	74	5,687,000	5,523,200	7,528,000	7,394,000
Turnips, etc.....	79	83	78	84	2,872,000	2,650,200	7,270,000	13,683,000
					tons.	tons.	tons.	tons.
Hay and clover...	90	88	90	93	896,000	787,000	790,000	1,325,000
New Brunswick—								
Wheat.....	86	82	87	92	208,000	157,400	818,000	573,000
Oats.....	89	79	91	92	5,375,000	4,377,300	6,417,000	8,520,000
Barley.....	85	87	86	88	38,000	34,500	140,000	251,000
Rye.....	—	—	100	100	—	—	5,000	7,000
Buckwheat.....	83	78	82	88	1,001,000	867,000	1,230,000	1,646,000
Potatoes.....	81	78	78	71	6,065,000	5,375,000	7,081,000	7,661,000
Turnips, etc.....	86	87	82	84	2,722,000	2,013,200	5,312,000	7,475,000
					tons.	tons.	tons.	tons.
Hay and clover...	85	88	87	86	723,000	799,900	967,000	955,000
Quebec—								
Wheat.....	83	80	84	86	797,000	3,106,900	5,299,000	3,617,000
Oats.....	81	80	81	88	19,773,000	25,973,000	42,660,000	50,402,000
Barley.....	85	82	87	89	1,238,000	2,512,200	3,959,000	4,756,000
Rye.....	80	72	85	88	94,000	270,000	401,000	509,000
Buckwheat.....	79	71	70	84	1,516,000	1,916,300	3,298,000	3,428,000
Corn for husking..	78	75	75	84	251,000	1,352,000	899,000	1,502,000
Flaxseed.....	79	83	85	84	4,000	39,000	71,000	93,000
Potatoes.....	73	68	81	77	10,711,000	12,347,400	31,538,000	44,106,000
Turnips, etc.....	85	84	86	88	2,253,000	13,237,600	24,276,000	24,446,000
					tons.	tons.	tons.	tons.
Hay and clover...	89	83	89	90	4,649,000	4,204,000	6,052,000	5,804,000

III. Produce of Merchantable Quality, 1916-1919—concluded.

Field Crops.	Per cent of total yield merchantable.				Yield of harvest merchantable.			
	1916	1917	1918	1919	1916	1917	1918	1919
	p.c.	p.c.	p.c.	p.c.	bush.	bush.	bush.	bush.
Ontario—								
Wheat.....	78	88	71	83	13,986,000	14,360,100	10,821,000	17,180,000
Oats.....	75	90	93	81	38,078,000	88,268,000	122,530,000	63,494,000
Barley.....	79	90	93	82	5,923,000	10,071,900	20,550,000	10,770,000
Rye.....	88	90	90	86	1,063,000	1,086,300	1,632,000	1,908,000
Buckwheat.....	72	79	78	81	1,827,000	2,399,600	3,586,000	3,298,000
Corn for husking..	57	43	66	79	3,397,000	2,562,800	8,590,000	11,970,000
Flaxseed.....	64	75	82	88	27,000	39,000	161,000	114,000
Potatoes.....	66	79	80	79	5,355,000	14,995,000	15,501,000	11,965,000
Turnips, etc.....	67	83	86	79	13,713,000	26,599,000	55,811,000	33,777,000
Hay and clover...	92	89	88	90	5,629,000 tons.	4,536,300 tons.	4,045,000 tons.	5,030,000 tons.
Manitoba—					bush.	bush.	bush.	bush.
Wheat.....	85	95	97	97	25,217,000	39,987,700	46,745,000	39,746,000
Oats.....	90	92	93	94	43,595,000	41,745,000	50,661,000	54,236,000
Barley.....	83	90	94	89	11,395,000	14,337,000	26,286,000	15,263,000
Rye.....	99	90	97	95	551,000	574,500	3,818,000	3,885,000
Flaxseed.....	96	87	91	97	200,000	127,600	993,000	505,000
Potatoes.....	87	77	89	80	4,097,000	2,805,100	7,409,000	4,230,000
Turnips, etc.....	86	95	91	84	389,000 tons.	439,900 tons.	2,270,000 tons.	935,000 tons.
Hay and clover...	93	93	90	94	132,000	69,800	67,000	377,000
Saskatchewan—					bush.	bush.	bush.	bush.
Wheat.....	90	97	95	96	132,803,000	114,383,700	87,868,000	86,394,000
Oats.....	94	92	89	92	153,481,000	113,356,500	95,455,000	103,184,000
Barley.....	92	92	91	95	9,122,700	12,942,500	10,818,000	8,522,000
Rye.....	98	95	100	100	537,000	948,500	1,420,000	2,000,000
Flaxseed.....	93	93	91	93	6,223,600	4,380,300	3,827,000	4,176,000
Potatoes.....	87	85	80	84	6,367,500	7,658,500	5,769,000	9,450,000
Turnips, etc.....	83	86	98	88	340,000 tons.	1,485,200 tons.	2,159,000 tons.	3,160,000 tons.
Hay and clover...	94	97	95	94	555,000	358,500	344,000	262,000
Alberta—					bush.	bush.	bush.	bush.
Wheat.....	76	96	92	95	49,467,000	50,872,400	21,852,000	32,846,000
Oats.....	91	94	89	93	93,001,000	81,111,300	53,687,000	61,124,000
Barley.....	78	90	87	93	7,624,000	9,347,600	6,748,000	9,823,000
Rye.....	90	89	63	97	396,000	563,400	520,000	1,138,000
Flaxseed.....	91	86	85	94	1,188,000	686,900	388,000	209,000
Potatoes.....	82	85	85	72	3,922,000	6,297,700	2,651,000	5,934,000
Turnips, etc.....	83	79	96	75	394,000 tons.	1,794,900 tons.	2,263,000 tons.	2,077,000 tons.
Hay and clover...	88	92	94	92	294,000	672,000	366,000	438,000
British Columbia—					bush.	bush.	bush.	bush.
Wheat.....	89	92	95	98	441,000	569,000	775,000	980,000
Oats.....	94	83	94	97	3,412,000	2,685,700	1,457,700	2,063,000
Barley.....	97	93	99	97	120,000	149,600	207,000	336,000
Rye.....	—	—	100	98	—	—	25,000	108,000
Potatoes.....	80	77	82	78	2,314,000	1,926,500	2,807,000	2,387,000
Turnips, etc.....	85	82	88	86	1,573,000 tons.	1,297,200 tons.	2,138,000 tons.	2,319,000 tons.
Hay and clover...	91	90	89	97	425,000	215,100	193,000	183,000

STOCKS OF GRAIN IN CANADA ON MARCH 31, 1920.

The Dominion Bureau of Statistics has completed its sixth annual inquiry as to the total stocks of wheat, oats, barley and flaxseed in Canada at the end of March. The inquiry was conducted by means of special schedules issued to elevator, flour mill and railway companies, requesting the actual quantities of wheat, wheat flour, oats, oatmeal, rolled oats, barley, barley meal, flax and linseed meal on hand or in transit on the morning of Wednesday, March 31, 1920. The quantities of grain in the terminal elevators at Fort William and Port Arthur, and in the interior terminal elevators, were furnished by the Board of Grain Commissioners for Canada.

For the quantity of grain estimated to be in farmers' hands on March 31, use was made of the replies to the annual schedule addressed to crop correspondents as compiled in Table I on page 70 of this issue.

In the following statement (Table I) the results are given of the compilation of the returns received for wheat, and wheat flour expressed as wheat, as compared with the results of the similar inquiries of 1917 to 1919:—

I. Stocks of Wheat in Canada at the end of March, 1917-20.

Wheat in—	March 31, 1917.	March 30, 1918.	March 31, 1919.	March 31, 1920.
	bush.	bush.	bush.	bush.
Terminal elevators.....	24,441,799	4,149,357	31,243,073	8,718,874
Winter storage in vessels.....	89,245	2,882,141	241,605	—
Interior terminal elevators.....	5,168,242	1,098,610	2,447,371	3,897,787
Country elevators.....	30,549,209	10,459,466	16,514,133	14,148,779
Public elevators.....	2,516,461	1,935,639	19,536,882	3,856,958
Flour mills.....	4,884,825	4,802,236	5,390,066	5,575,253
Transit by rail.....	12,862,356	20,011,179	10,854,840	6,271,697
Farmers' hands.....	45,638,000	31,684,700	32,315,000	34,837,000
Totals.....	126,150,137	77,023,328	118,542,970	77,306,348

RECAPITULATION.

Wheat in—	March 31, 1917.	March 30, 1918.	March 31, 1919.	March 31, 1920.
	bush.	bush.	bush.	bush.
Elevators.....	62,764,956	20,525,213	69,983,064	30,622,398
Flour mills.....	4,884,825	4,802,236	5,390,066	5,575,253
In transit by rail.....	12,862,356	20,011,179	10,854,840	6,271,697
In farmers' hands.....	45,638,000	31,684,700	32,315,000	34,837,000
Totals.....	126,150,137	77,023,328	118,542,970	77,306,348

II. Stocks of Oats, Barley and Flax in Canada on March 31, 1919 and 1920.

Grain in—	Oats.		Barley.		Flax.	
	March 31, 1919.	March 31, 1920.	March 31, 1919.	March 31, 1920.	March 31, 1919.	March 31, 1920.
	bush.	bush.	bush.	bush.	bush.	bush.
Terminal elevators...	4,236,660	3,718,916	4,617,581	1,737,733	492,547	219,265
Interior terminal elevators.....	2,386,567	1,348,319	337,104	113,137	11,997	13,216
Country elevators....	7,309,486	10,368,491	1,893,736	1,739,249	355,506	324,697
Public elevators.....	1,573,914	836,203	992,983	425,514	3,687	19,954
Flour mills.....	2,303,362	731,750	293,814	111,435	17,382	12,013
Transit by rail.....	5,243,353	4,398,518	2,412,589	579,100	350,568	104,076
Farmers' hands.....	141,694,000	123,090,000	20,026,000	11,024,000	1,039,000	1,400,500
Totals.....	164,747,342	144,492,197	30,573,807	15,730,168	2,270,687	2,093,721
RECAPITULATION.						
Elevators, etc.....	15,506,627	16,271,929	7,841,404	4,015,633	863,737	577,132
Flour mills.....	2,303,362	731,750	293,814	111,435	17,382	12,013
Transit by rail.....	5,243,353	4,398,518	2,412,589	579,100	350,568	104,076
Farmers' hands.....	141,694,000	123,090,000	20,026,000	11,024,000	1,039,000	1,400,500
Totals.....	164,747,342	144,492,197	30,573,807	15,730,168	2,270,687	2,093,721

The returns received, carefully collated with the data collected by the Internal Trade Division of the Bureau, show that on March 31, 1920, the quantity in Canada of wheat, and of wheat flour expressed as wheat, was in round figures 77,306,000 bushels, as compared with 118½ million bushels last year, 77 million bushels in 1918 and 126 million bushels in 1917. The total for 1920 includes 36,197,000 bushels in elevators and flour mills, 34,837,000 bushels in farmers' hands, and 6,272,000 bushels in transit by rail. Of oats, including oat products expressed as oats, the total quantity in Canada on March 31, 1920, was about 144½ million bushels, as compared with 164¾ million bushels last year, the total for 1920 comprising 17 million bushels in elevators and flour mills, 123 million bushels in farmers' hands and nearly 4½ million bushels in transit by rail. The total quantity in Canada on March 31, 1920, of barley was about 15¾ million bushels, as compared with 30½ million bushels last year, comprising for 1920 4,127,000 bushels in elevators and flour mills, 11 million bushels in farmers' hands and 579,000 bushels in transit. Of flaxseed, the quantity in stock on March 31, 1920, was 2,094,000 bushels, as compared with 2,271,000 bushels last year.

DISTRIBUTION OF THE WHEAT AND OAT CROPS OF CANADA, 1909-19.

Annual estimates of the production of wheat and oats in Canada have been made by the Dominion Government since 1908; so that continuous records have now been published for a period exceeding

ten years. On various occasions the data collected have been used as the basis of studies respecting the distribution of these crops, and especially the quantities available for export and home consumption, questions which during the war were of supreme importance and which in consequence of the present world scarcity still possess extraordinary interest.¹

In the last article of this kind, published in the Monthly Bulletin of April, 1919, the data examined covered the four crop years ended August 31, 1919. It is now proposed to deal similarly with the decennial period ended August 31, 1919, with the object of illustrating two points, inquiries as to which are frequently made, viz., (1) the average annual home consumption of wheat and oats and (2) the average per capita consumption of wheat. It is evident that data extending over a series of ten years may be trusted to yield truer averages than those of shorter periods of four or five years, whilst, as the ten-year period includes the four strenuous years of the war, they should afford interesting comparisons between the conditions of war and peace.

DISTRIBUTION OF THE CANADIAN WHEAT CROP.

Table I shows therefore the distribution of the Canadian wheat crop for the ten years 1909-10 to 1918-19, in respect of the crop years ended August 31.

I. Distribution of the Canadian Wheat Crop, 1909-19.

A. PRODUCTION.

Crop Year.	Gross production.	Loss in cleaning.	Grain not merchantable.	Net production.	Imports.	Available for distribution
	000 bush.	000 bush.	000 bush.	000 bush.	000 bush.	000 bush.
1909-10.....	166,744	5,002	6,876	154,866	219	155,085
1910-11.....	132,049	3,962	7,923	120,164	407	120,571
1911-12.....	230,924	6,928	29,442	194,554	388	194,942
1912-13.....	224,159	6,725	17,933	199,501	887	200,388
1913-14.....	231,717	6,952	16,220	208,545	660	209,205
1914-15.....	161,280	4,838	10,487	145,955	1,914	147,869
1915-16.....	393,543	11,806	18,873	362,864	282	363,146
1916-17.....	262,781	7,883	39,138	215,760	309	216,069
1917-18.....	233,743	7,012	10,736	215,995	261	216,256
1918-19.....	189,075	5,672	13,705	169,698	323	170,021
Totals....	2,226,015	66,780	171,333	1,987,902	5,650	1,993,552
1919-20.....	193,260	5,798	10,830	176,632	164 ²	176,796 ²

¹ For previous articles on this subject, see Census and Statistics Monthly, Vol. 4, No. 34, March, 1911, pp. 51-53; Vol. 7, No. 67, February and March, 1914, pp. 29-31; Vol. 8, No. 79, March, 1915, pp. 73-75; and Monthly Bulletin of Agricultural Statistics, Vol. 12, No. 128, April, 1919, pp. 81-84.

² Partly estimated.

I. Distribution of the Canadian Wheat Crop, 1910-19—Concluded.

B. DISTRIBUTION.

Crop Year.	Available for dis- tribution.	Exports of wheat.	Exports of wheat flour.	Total exports.	Retained for seed.	Balance for home con- sumption.
	000 bush.	000 bush.	000 bush.	000 bush.	000 bush.	000 bush.
1909-10.....	155,085	52,299	15,641	67,940	15,510	52,430
1910-11.....	120,571	52,099	14,952	67,051	19,426	34,094
1911-12.....	194,942	78,929	19,587	98,516	19,244	77,182
1912-13.....	200,388	97,872	20,047	117,919	19,276	63,193
1913-14.....	209,205	111,663	21,387	133,050	19,659	56,496
1914-15.....	147,869	62,377	22,445	84,822	26,441	36,606
1915-16.....	363,146	253,598	36,197	289,795	26,897	46,454
1916-17.....	216,069	134,024	36,779	170,803	25,823	19,443
1917-18.....	216,256	105,613	49,622	155,235	30,369	30,652
1918-19.....	170,021	59,207	44,331	103,538	33,470	33,013
Totals....	1,993,552	1,007,681	280,988	1,288,669	236,115	449,563
1919-20.....	176,796	70,146 ¹	20,000	90,146 ¹	33,250 ¹	56,896 ¹

The table is divided into A, Production, and B, Distribution. The first part (A) gives the gross production according to the final annual estimate of the Census and Statistics Office, or, from 1918, of the Dominion Bureau of Statistics. The loss in cleaning, viz., 3 p.c. of the gross production, is the usual proportion based on actual experience. The grain not of merchantable quality varies with the season, and is ascertained from the reports of the Bureau's crop correspondents, published annually in April. To the net production are added the imports of wheat and of wheat flour expressed as bushels of wheat, the last column giving the balance annually available for distribution. In the first column of the second part (B) the amount available for distribution is repeated, and in the last column is shown the balance for home consumption after deduction of the exports and of the quantity retained for seed. This quantity is calculated at the rate of $1\frac{3}{4}$ bushel per acre upon the acreage sown. The imports and exports of wheat flour have been converted into wheat at the customary rate of 4 bushels 35 lb. of wheat to the barrel of flour, a rate affected to some extent by alterations in the flour standard during the war, but not so appreciably as to modify materially the calculations based on the average actually used.

From the last column of Table I (B) it will be observed that the balance of wheat available for home consumption has varied from the maximum of 77,182,000 bushels in 1911-12 to the minimum of 19,443,000 bushels in 1916-17, a critical year of the war. Adding together the balances for the ten years and dividing by ten, we find

¹ Partly estimated.

the average annual consumption to be 44,956,000 bushels, or, in round numbers, 45,000,000 bushels, which is 5 million bushels less than the quantity usually estimated as sufficient for a year's food of the people of Canada, allowing $6\frac{1}{4}$ bushels per capita for a population of 8 millions. For the five years ended August 31, 1910-14, the annual average available for home consumption was 56,679,000 bushels and for the four war years ended August 31, 1915 to 1919 it was 33,289,000 bushels.

The rate of $6\frac{1}{4}$ bushels, which it has been customary to use as the average consumption per head of wheat in Canada, is based upon the census data of 1911, and it does not differ greatly from the average of $6\frac{3}{4}$ bushels per head, which was given in the Statistical Year Book of Canada for 1891 (page 270) as the result of calculations extending over the ten years 1881 to 1890. Having now data for a period of ten years 1909-10 to 1918-19, based upon estimates more complete and trustworthy than were available in 1891, it is interesting to ascertain what the apparent annual average per capita consumption of wheat has been during this decennium. Accordingly, in Table II, are the figures of population for the ten years, as estimated on March 31, excepting for 1911, which are the actual figures of the Census.

II. Estimated Population of Canada, 1910-19 ("000" omitted).

Year.	Number.	Year.	Number.	Year.	Number.
1910.....	6,917	1914.....	7,725	1918.....	8,593
1911.....	7,207	1915.....	7,928	1919.....	8,835
1912.....	7,343	1916.....	8,140		
1913.....	7,530	1917.....	8,361	Total.....	78,579

From the total population fed annually during the ten years, viz., 78,579,000, it is necessary to deduct the numbers of the troops overseas during the war. These may be placed for the four years of war at 1,046,000 (33,000 in 1915, 213,000 in 1916 and 400,000 in each of the years 1917 and 1918), which deducted from 78,579,000 leaves 77,533,000 as the net population fed in Canada. Over the ten years the annual average per capita consumption of wheat in Canada is therefore 5.8 bushels. During the four years of war (1915 to 1918), the per capita consumption, as calculated from the data in the tables, fell to 4.2 bushels, whilst during the pre-war period of the five years 1910 to 1914 it was 7.7 bushels.

For the crop year ending August 31, 1920, the data are at present incomplete; but it is possible to estimate approximately the distribution of the wheat crop of 1919, and the figures for the year are therefore included tentatively in the table. The quantity available for distribution is shown as 176,796,000 bushels. Of this quantity

33,250,000 bushels are estimated as required for seed, the quantity being placed at 220,000 bushels less than last year owing to conditions as reported from the West. Allowing 53,400,000 bushels, or 6 bushels per capita, for the home consumption of a population estimated at 8,900,000, and deducting the sum of these two items, viz., 86,650,000, from the quantity available for distribution, viz., 176,796,000 bushels, we get 90,146,000 bushels as the exportable surplus during the crop year ending August 31, 1920. For the seven months ended March 31, 1920, there had already been exported 62,200,000 bushels; so that apparently, according to these data, there should still be available for export during the remaining five months of the crop year ending August 31, 1920, 27,946,000 bushels, or in round figures, say, 28 million bushels.

Examining the question in the light of the recent inquiry of the Bureau as to the stocks of grain in Canada, Table I on page 76 of this issue shows that on March 31, 1920, the stocks of wheat in Canada amounted to 77,306,000 bushels, of which 34,837,000 bushels were in farmers' hands, the last-named quantity agreeing closely with the estimate in the above table of 33,250,000 bushels as required for seed. Deduction of the amount required for seed leaves 44,056,000 bushels as the quantity available for food and export during the remaining five months of the current crop year, April to August. The year's food requirements having been placed at 53,400,000 bushels of which about seven-twelfths should have been consumed, the requirements for the remaining five-twelfths, should be 22,250,000 bushels, leaving 21,806,000 bushels, or, in round figures, 22 millions bushels for export. The difference therefore between the two estimates is not more than six million bushels. Account is not taken of the "carry over" from the previous crop year, estimated at nearly $5\frac{1}{2}$ million bushels (see page 221 of the Monthly Bulletin for September, 1919), as there may be a similar "carry over" at the close of the present crop year. If the rate of consumption should be less than that allowed for, viz., 6 bushels, the quantity available for export would be correspondingly more. A ratio per capita of $5\frac{1}{2}$ bushels instead of 6 would increase the exportable surplus by 4,450,000 bushels, and bring the two estimates into even closer agreement.

DISTRIBUTION OF THE CANADIAN OAT CROP.

Table III, constructed similarly to that of wheat, shows the production, imports and exports of oats during the crop years ended August 31, for the decennial period 1910-19.

III. Distribution of the Canadian Oat Crop, 1910-19.

A. PRODUCTION.

Crop Year.	Gross production.	Grain not merchantable.	Net production.	Imports.	Available for distribution.
	000 bush.	000 bush.	000 ¹ bush.	000 bush.	000 bush.
1909-10.....	353,466	32,276	321,190	22	321,212
1910-11.....	243,506	17,045	226,461	20	226,481
1911-12.....	365,179	39,987	325,192	96	325,288
1912-13.....	391,629	35,991	355,638	240	355,878
1913-14.....	404,669	21,915	382,754	322	383,076
1914-15.....	313,078	27,087	285,991	2,034	288,025
1915-16.....	464,954	36,097	428,857	2,129	430,986
1916-17.....	410,211	42,940	367,271	1,091	368,362
1917-18.....	403,010	36,400	366,610	895	367,505
1918-19.....	426,312	43,318	382,994	4,705	387,699
Totals.....	3,776,014	333,056	3,442,958	11,554	3,454,512
1919-20.....	394,387	40,427	353,960	5,000 ¹	358,960 ¹

B. DISTRIBUTION.

Crop Year.	Available for distribution.	Exports of oats.	Exports of oat products.	Total exports.	Retained for seed.	Balance for home consumption.
	000 bush.	000 bush.	000 bush.	000 bush.	000 bush.	000 bush.
1909-10.....	321,212	6,063	2,341	8,404	23,256	289,552
1910-11.....	226,481	7,277	1,335	8,612	21,630	196,239
1911-12.....	325,288	9,046	2,345	11,391	24,077	289,820
1912-13.....	355,878	13,956	1,401	15,357	24,915	315,606
1913-14.....	383,076	34,421	1,197	35,618	26,085	321,373
1914-15.....	288,025	13,382	273	13,655	25,154	249,216
1915-16.....	430,986	62,424	1,085	63,509	28,789	338,688
1916-17.....	368,362	63,250	2,098	65,348	27,491	275,523
1917-18.....	367,505	25,307	3,899	29,206	33,283	305,016
1918-19.....	387,699	13,679	1,578	15,257	36,976	335,466
Totals.....	3,454,512	248,805	17,552	266,357	271,656	2,916,499
1919-20.....	358,960	10,700 ¹	2,300 ¹	13,000 ¹	37,500 ¹	308,460 ¹

The production and exportation show greater fluctuation than in the case of wheat, areas being frequently sown to oats where seasonal conditions make it impossible to sow wheat in time; but the table shows an increased production and exportation during the latter half of the period. For the first five years, 1910 to 1914, the average gross annual production was 351,689,000 bushels and the exportation 15,876,000 bushels, whilst for the latter half, 1915 to 1919, the annual averages were 403,513,000 bushels production and 37,395,000 bushels

¹ Partly estimated.

exports. Over the whole period of ten years, the annual average of gross production was 377,600,000 bushels and of exports 26,635,000 bushels. Oats are used principally for the feeding of home live stock; and, as the table shows, only a comparatively small proportion is exported. The numbers of farm live stock increased progressively during the ten years, and the war stimulated exportation. The production of oats showed a corresponding augmentation.

For the crop year ending August 31, 1920, the balance available for home consumption is placed at 308,460,000 bushels (Table III,B), but the total includes imports and exports for the five months ending August 31, 1920, which are forecasts based on previous records. Of the balance estimated as available for home consumption, viz. 308,460,000 bushels, about seven-twelfths, or say 180 million bushels, would have been consumed in Canada by March 31, 1920, leaving 128,460,000 bushels for home consumption during the five months ending August 31, 1920. The quantity remaining in stock in Canada on March 31, 1920, was, according to Table III on page 77, 144,492,000 bushels, or 16,032,000 bushels more than this figure; but if we reckon in the "carry over" from the crop year 1918-19, shown in the September 1919 issue of the Monthly Bulletin (page 221) to have been 19,280,000 bushels, the two sets of data tally within 3,248,000 bushels.

CROP REPORTS FROM THE PROVINCES.

Summarized from Returns of Crop Correspondents, March 31, 1920.

Maritime Provinces.—In spite of a severe winter the condition of all live stock is reported as fair to good, with a sufficient amount of fodder in most districts to bring the animals to grass. Where necessary, hay, roots and mill feed had to be purchased at a high rate. The demand for all classes of stock is good with high prices prevailing, especially for milch cows and young pigs. Potatoes too were selling at a high figure. Spring weather set in earlier than usual, and the frost was commencing to come out of the ground at the end of March, high winds helping to dry out the soil.

Quebec.—The condition of live stock on the whole is good, but some correspondents state that horses have suffered a good deal from sickness, including cold, grippe, distemper, etc. According to the majority of correspondents, prices for draught horses are high, ranging from \$100 to \$350 each; other correspondents report low prices and small demand. Milch cows are doing very well, although they are lean. There is a very little increase in the number of sheep and swine. The high price of feed is forcing farmers to reduce the numbers of swine. Farmers, in general, will have to buy seed. The snow is disappearing fast; new meadows seem to have wintered well.

Ontario.—Horses are in good shape for spring work. There is an increased demand for draught horses at improved prices. Not so many are being bred and a scarcity later on is predicted. Dairy cows are being extra well cared for, as milk products are bringing such good prices. There is a brisk demand and high prices prevail. Beef cattle are not in such good flesh as usual owing to the scarcity and dearth of grain feed, and a good many unfinished cattle have been sent to market. Sheep are in thrifty condition, and the lamb crop is good. Hog production is said to be on the decline owing to uncertain markets and dear feed. Considerable mortality has been reported amongst young pigs. Spring has opened up early, and fields are everywhere bare at March 31 with some ploughing being done on high, light land. The maple syrup season is on, but the run is said to be light. Labour promises to be scarcer than ever, and consequently more land is likely to be seeded to grasses.

Manitoba.—Live stock has come through the winter in fairly good condition, except in some cases, where there was a shortage of feed. Generally there was a good supply of hay, and a quantity was shipped out early in the season. The quality of straw was poor on account of rust. The late spring has made it necessary to conserve fodder; consequently animals are thin. Many animals perished in the March blizzards. A number of farmers plan to cut down their stock on account of the high cost of labour, but the market is dull and prices are below the average, except for good dairy cows and heavy horses. While the majority of farmers have enough seed grain for their own use, many are buying seed.

Saskatchewan.—All stock is below the average condition. Severe losses have already occurred among range horses and cattle, and more will die before there is any growth on the prairies. Stock which wintered under shelter fared better, although all are suffering from shortage of feed. Very few hogs were kept through the winter. While a few farmers have saved enough wheat and oats for seed, many farmers sold their supplies, expecting an early spring, and are now obliged to buy at high prices. There are practically no sales at present.

Alberta.—The winter was long and severe, and all animals have suffered and are in very poor condition on account of the serious shortage of feed. Crops were practically a failure last season. Farmers are obliged to buy hay and feed and the supply is not equal to the demand. Many horses and cattle are dying. At the end of March snow was still covering the ground, and the situation was most serious. Good prices are being offered for well nourished cattle and for horses for springwork, but few are available.

British Columbia.—All live stock wintered well, and are in good condition. In many cases the number of swine and other stock was reduced before the winter set in, on account of the scarcity and high cost of feed. There is a good market for heavy horses and good dairy cows. The early spring is favourable for range cattle, and prospects are good.

CROP REPORTS FROM THE PROVINCIAL GOVERNMENTS.

Ontario.—The Ontario Department of Agriculture reports (April 13) that the keen weather of the past week did harm to some fall wheat and clover fields, but the extent of the injury will not be known until spring growth is more advanced. Snow flurries, however, were sufficiently frequent and heavy in most localities to give fair protection to the young plants from the trying cold and wind. Labour is hard to secure, and prices are keeping up. Wentworth reports that from \$60 to \$75 a month is being offered married men. Ontario states that fit workers will have no difficulty in getting \$60 a month and board for a season of eight months.

Saskatchewan.—The first bulletin of the Saskatchewan Department of Agriculture, dated April 20, states that seeding will be considerably delayed owing to the lateness of the spring opening and the heavy snowfall around April 15. In many places, especially in the northern portions of the province, snow is lying on the level to a considerable depth. Seeding operations are not expected to be general until the last week of April, unless there is exceptionally favourable weather. From the reports received there appears to be a sufficiency of seed grain throughout the province, but the feed question is causing some anxiety and will be a factor in determining the prospective acreages. Estimates given on the acreage to be sown to wheat show that a decrease of from 20 to 25 p.c. is probable, although weather conditions may affect this to some extent. Several districts report some flax and oats still unthreshed. A few districts in the southern portions of the province report snow all gone except in the hollows. A heavy loss in live stock is reported in some parts of the province, while others report very little more than the average winter loss. (*See also p. 100.*)

Alberta.—The Department of Agriculture issued a report on May 1 dealing with the moisture conditions in the province and the progress of seeding. It states that the winter had been longer at both ends than it has been over a period of 20 years, and has intensified the effects of feed shortage, which had its beginning at this time last year. The seeding is from 20 to 30 days later than it was last year, but owing to the good moisture conditions, if quick general seeding were possible, the prospects are the best in half a dozen years. It is feared the late season is going to curtail the wheat acreage, especially in the centre and north, but there are much better prospects for a good total acreage than people entertained at one time. The report concluded with the statement that there seems at present a reasonable probability that the acreage sown will fall only a small percentage below that of last year.

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—Most of the time during March the weather has been fine and the temperature higher than the average for the same period for the past eight years. Although the snowfall

has been light, more rain than usual has been recorded. There has been less bright sunshine than ordinarily, although more than in 1919. The highest temperature registered is 63.6, and the lowest -16.4, while the mean for the month is 28.36. A year ago, the maximum was 47.0, the lowest -7.8, and the mean 25.75. Only once in the last thirty years has there been a higher maximum March temperature, and that was in 1910, when the thermometer reached 72.6. The precipitation totals 2.39 inches, made up of 1.42 inch of rain and 9.75 inches of snow; while a year ago it amounted to 4.53 inches, when there was 1.78 inch of rain and 27.50 inches of snow. The sunshine averages 5.19 hours a day, as against 4.78 hours a day for March, 1919.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—"March came in cold, the thermometer dropping to 7 on the 3rd. Except for some light flurries of snow, the weather was fine up to the 11th. The third week was stormy throughout, with quite a heavy rain on the 15th, and a fall of six inches of snow on the 21st. From the latter date till the 31st, the weather has been very mild. A thaw, which set in on the 23rd, cleared off all the snow and ice from the fields, and the greater part of the snow from the highways. During this period, the temperature rose to 60 and for four days no frost was recorded. There has been a very heavy freshet, which destroyed many mill dams, and the month closed with the roads in very poor condition throughout the province. An experiment in fattening dry cows and steers was completed during the month. Four pens of cattle were purchased, each at the market price of its class, and each pen was allowed the same quality and quantity of feed for 115 days, and all feed was charged at cost. The scrub cows gave a net loss of \$6.67 each, the beef grade cows a loss of \$4.34 each, the dairy steers a gain of \$8.36 each, and the beef steers a gain of \$14.34 each. The beef steers made the very satisfactory increase in weight of 224 lb., as compared with 85 lb. of increase for the poorest pen of cows."

Kentville, N.S.—W. S. Blair, Superintendent reports: "March on the whole, has been a pleasant month. The early part was cold for a short period, the temperature dropping to 5, -10. and -6., on the 2nd, 5th and 8th, respectively, since which no zero weather has been experienced. The mean temperature is 31.09, as compared with 27.03 as the average for the corresponding period of the five previous years. On the 12th, a mild spell, which was followed by rain, caused much flooding and a rapid breaking up of streams, doing much damage in many places by carrying away bridges and washing out roads. The precipitation totals 3.04 inches, made up of 2.42 inches of rain and 6.25 inches of snow; while for this time during the five years from 1915 to 1919, the average was 2.51 inches, consisting of 0.86 of an inch of rain and 16.5 inches of snow. The sunshine aggregates 123.5 hours, as compared with 133.9 hours as the total for the previous five-year period. Little snow remained after the 13th, and, at the end of the month, the frost is pretty well out of the ground, and the land is comparatively dry for this time of year."

Nappan, N. S.—W. W. Baird, Superintendent, reports:—"March has been an ideal spring month, and, although the thermometer dropped quite low on several occasions, and especially on the 3rd, it has been very much milder than usual, on the whole, the mean temperature being 34.85 as compared with an average mean of 24.72 for the corresponding period from 1915 to 1919. The highest temperature recorded is 64. and the lowest -14. The precipitation totals 3.58 inches, made up of 3.38 inches of rain and 2 inches of snow. A rainfall of 2.76 inches, on the 13th and 14th, following a thaw which began on the 10th, caused the heaviest spring freshet that has ever been experienced in this section, washing away many bridges and flooding some of the roads so much as to make them quite impassable for some days. The winter has been a long and cold one, with conditions very favourable for lumbering operations. At the end of the month, the frost is out of the ground and everything would seem to point to an early spring."

Fredericton, N.B.—W. W. Hubbard, Superintendent, reports:—"The weather during March has been fairly seasonable, with just a trifle higher mean temperature and slightly less precipitation than the average at Fredericton for the last forty-five years. Winter conditions and roads remained fairly steady until the 27th, when there set in a heavy rain, totalling over two inches in four days, and the snow went rapidly, causing a six foot rise in the river and breaking up the roads. On account of the very rough February, a great deal of winter work remained to be done in March, and the break-up came before all had been completed. At the Station, all the essential work had been done, but considerable gravel hauling for the roads had to be abandoned. Live stock at the Station has come through the winter well, and also throughout this part of the country generally. There has been plenty of feed, though the high prices prevailing for hay and turnips led to very scanty feeding in some cases. It is difficult for farmers to see much profit ahead from feeding hay at \$35 per ton and turnips at \$1.25 per barrel.

Ste.-Anne de la Pocatière, Que.—Jos. Bégin, Superintendent, reports:—"The weather during March has been variable, the highest temperature recorded being 61 and the lowest -19. The mean is 24, this being exactly the same mean temperature as in March, 1919. The bright sunshine averages 4.1 hours a day, compared with 4.2 hours a day for this period of last year. The first thaw occurred during a fine spell from the 23rd to the 26th, when most of the snow melted with any hardly washing out of the fields. The sudden breaking up of the winter roads caused some inconvenience and loss to farmers, and also to lumbermen, who had considerable pulp and logs in the woods. There is a great shortage of hay in this section, and, unfortunately, there is a reason to fear that the next crop may suffer more or less from the spring frost, now that the fields are completely bare. Work engaging attention at the Station has included looking after the live stock and the roads and fences, repairing implements, and cleaning seeds."

Cap Rouge, Que.—G. A. Langelier, Superintendent, reports:—"March has been colder, wetter, and brighter than the average corresponding month of the past eight years, the figures being, respectively, 24.33 and 24.82 for mean temperature, 3.71 and 2.96 inches for precipitation, and 142.0 and 139.8 hours for sunshine. Thirty pure-bred French Canadian mares have been bought and sent to the new 500-acre Horse Farm at St. Joachim, Montmorency county; with the stock at Cap Rouge, there are now four stallions and colts, besides fifty mares and fillies, all registered, available for experimental work in the breeding, feeding, housing, and management of horses. Caring for live stock and poultry, hauling feed and manure, and preparing seed and implements for the coming season have been the main lines of work at the Station."

Lennoxville, Que.—J. A. McClary, Superintendent, reports:—"The weather during the first week in March was cold, and there was a heavy snowfall on the 6th. During the remaining three weeks, it has been quite mild, and wheels have been in use since the 23rd. The mean temperature is 55.32, the highest 66 and the lowest -33, compared with a mean of 27.56, a maximum of 60 and a minimum of 1 for the same period last year. The sunshine recorded totals 150.5 hours, compared with 122.6 hours a year ago. The precipitation amounts to 3.09 inches, as against 2.22 inches in 1919. The ice cleared out of the St. Francis River during the night of the 27th, without any particular damage being caused by high water; this is one day sooner than last year, and five days earlier than in the spring of 1918. In the early part of March, farmers finished their work in the woods and their heavy teaming. Very little maple syrup or sugar has yet been made, as the weather has been too warm for an abundant flow of sap during the latter part of the month."

Brandon, Man.—W. C. McKillican, Superintendent, reports:—"Meteorological conditions during March, on the whole, have been about as usual. The first week was quite cold; the weather during the remainder of the month has been rather changeable, with the temperature often rising and falling quite suddenly. From the 18th to the 22nd, there was a warm spell, which took off most of the snow and spoiled sleighing; but this was followed by more cold and snow, which brought March to a wintry close. At the end of the month, farmers are getting ready for seeding, but prospects are that crops will not be got in early. The winter has been a long and steady one, and on many farms feed supplies are getting low. At the Experimental Farm, the care of stock and the preparation of seed have been the principal work. Live stock is in good condition, while some very creditable egg records are being made by the hens."

Indian Head, Sask.—N. D. Mackenzie, Superintendent, reports:—"March set in with severe weather, which continued to the 8th, when the temperature moderated considerably, and most of the time since has been milder, with a good snowfall. On the 15th, there was experienced in Saskatchewan one of the worst blizzards for years, and some

losses of stock have been reported, principally with sheep. The work on the Experimental Farm has included hauling feed, bedding, and manure; picking over seed grain for plots; sorting potatoes; sowing flower and vegetable seeds in hot-house; and caring for the live stock and poultry. The extremely long winter has caused a serious shortage of feed in the province as a whole and, even hereabouts, some farmers are running short. A number of farms in the district have changed hands during the month at prices averaging probably about \$20 per acre higher than asked a year ago. This vicinity is rapidly becoming a Shorthorn centre. Nineteen new breeders have purchased pure-breds during the winter, and a number of others are intending to buy as soon as suitable arrangements can be made."

Rosthern, Sask.—Wm. A. Munro, Superintendent, reports:—"The weather during March has been almost as cold as in February, with several severe storms. With a total snowfall of 8.5 inches, there is almost as much snow on the ground as at the beginning of the month, and seeding promises to be late. As a result of the drought and the soil-drifting of last summer, feed is scarce. The farmers of this district, who usually burn thousands of tons of straw, are, this year, paying up to \$20 a ton for straw and \$40 a ton for hay; and, under such conditions, even old stacks would be very valuable. A blizzard on the 15th and severe storms on the 24th and 31st have blocked up the roads and railways, making it very difficult for farmers to load cars, or for the railroads to move the same. With a shortage of both feed and seed, the acreage sown in this district will probably be considerably reduced. At the Station, work has included hauling feed, caring for the stock, cleaning seed, and preparing the implements for seeding."

Scott, Sask.—M. J. Tinline, Superintendent, reports:—"Winter conditions have continued throughout March. A thaw occurred on the 12th and 13th, and mild weather from the 19th to the 29th has resulted in the disappearance of some of the snow. The winter has been unuasully long, with feed scarce and expensive; consequently, there has been some loss of live stock and, for the most part, animals that have wintered through are thin. Although farm help is not so scarce as in the past few years, wages run from \$75 to \$85 per month. The work on the Station has consisted mainly in fitting machinery, horses, etc., for the season's work and in the preparing seed grain for sowing here and for sale.

Lacombe, Alberta.—B. C. Milne, Assistant to the Superintendent, reports:—"March has been rather stormy, and, although no very cold weather has been experienced, the mean temperature is lower than for the preceding month. The storms, while doing damage in other sections of the country, have not been so severe in this district, and no loss of stock is reported in this vicinity. The prolonged and steady winter has worked great hardship in the more open sections of the country, and in north-eastern Alberta and in parts of central Alberta many head of stock have died from lack of feed and exposure. At the end of the month, most of the winter's snow is still on the

ground, and a fresh fall of six inches points to a rather late spring. There has been a very heavy demand for feed, and, consequently, prices have advanced considerably during the month. All the live stock at this Station is looking well, having come through the winter in good shape."

Lethbridge, Alberta.—W. H. Fairfield, Superintendent, reports:—"Excepting for the first seven days, the weather during March has been mild. The snow disappeared early in the month, but, on the 30th, after the surface frost had come out of ploughed ground sufficiently to permit of farm implements working satisfactorily, a snow storm intervened, and it is feared that this may result in delaying the beginning of seeding to a considerably later date than usual. The mild temperature which prevailed during the greater part of the month has helped the live stock situation, but the feed shortage is being very acutely felt, and it is feared that there will be considerable loss of stock on the range and on dry farms before the new grass is available."

Invermere, B.C.—R. G. Newton, Acting Superintendent, reports:—"Fairly low temperatures were recorded early in March, the minimum being -10. On the whole, the weather has been fine, and, toward the end of the month, was quite spring-like. The mean temperature, 27.5, is below the average for the past five years, while the precipitation, 0.67 of an inch, is the highest recorded at the Station for March. Range stock has come through the winter in poor condition. Mill feeds are costly and hay is scarce. Farm products are bringing high prices, especially potatoes, which are quoted at \$80 per ton."

Summerland, B.C.—R. H. Helmer, Superintendent, reports:—"March has been mild, but, as usual, there has been a good deal of wind. Spring work is well under way and pruning is practically finished. Orchard trees, especially peaches, cherries and apricots, have come through the winter in good condition, and, with favourable weather during the blossoming period, the fruit crop should not fall very short of that harvested in 1919. The roads in the district are in good condition for this time of the year. Hay is very scarce in the Okanagan Valley. Live stock is only in fair shape to go on to the range. Winter feed should be given more consideration all through the Valley and cattle fed better in order to keep up a good class of beef animal."

Agassiz, B.C.—W. H. Hicks, Superintendent, reports:—"The excellent weather experienced during February did not continue far into March. Two wet spells have occurred during the month, one from the 5th to the 15th, the other from the 24th to the 30th. During these periods, 6.44 inches of rain have fallen. This precipitation is about normal for March, but it has seemed excessive following the fine weather of February. At the close of the month, green is showing on the lawns and on pastures and hay meadows. This is a welcome sight to stockmen, as feed is scarce and expensive. Considerable ploughing has been done during March; but, with the exception of some early garden crops, very little seed has been sown. Potatoes are very expensive and difficulty is being experienced by some growers, in obtain-

ing suitable seed. Eggs are plentiful, selling, wholesale, for around 45 cents a dozen."

Sidney, Vancouver Island. B.C.—Lionel Stevenson, Superintendent, reports:—"Weather conditions during March have favoured land tillage. Frosts, although numerous, have not been severe, 25.5 being the lowest temperature recorded. The bright sunshine totals 108.4 hours. The growth of cereals, grass, tree foliage, etc., has been slow, as the soil has been cold. Early varieties of plums, peaches, and cherries are in blossom at the end of the month. The bloom of flowering bulbs has developed well, making a good showing during the closing days of the month. Considerable garden planting has been done at the Station and throughout the district. Much activity has been shown in the strawberry sections, every available strawberry and loganberry plant being set. Seed potatoes are in demand and all that can be secured will be planted in the district, probably resulting in an increased acreage, as compared with preceding years. The live stock of the district is in good condition. Poultry and poultry products continue to be in good demand, and a considerable increase in the number of poultry keepers is noted. Very little grain has been sown in March, although much ploughing has been done in preparation for seeding."

Meteorological Record for March, 1920.

The records of temperature, precipitation and sunshine at the Experimental Farms and Stations for the month of March are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature F.			Pre- cipitation in inches.	Hours of Sunshine.	
	Highest	Lowest.	Mean.		Pos- sible.	Actual.
Ottawa, Ont.....	63.60	-16.40	28.36	2.39	370	160.9
Charlottetown, P.E.I.....	60.00	- 7.00	29.48	4.75	370	130.4
Kentville, N.S.....	67.00	-10.00	31.09	3.04	370	123.5
Nappan, N.S.....	64.00	-14.00	34.85	3.58	370	119.4
Fredericton, N.B.....	63.50	-19.00	27.00	3.58	370	152.7
Ste. Anne de la Pocatière, Que.....	61.00	-19.00	24.00	3.02	370	129.4
Cap Rouge, Que.....	55.00	-19.90	24.33	3.71	368	142.0
Lennoxville, Que.....	66.00	-33.00	55.32	3.09	370	150.5
Brandon, Man.....	45.00	-24.00	14.10	1.10	370	132.5
Indian Head, Sask.....	42.00	-28.00	14.64	2.50	370	132.6
Rosthern, Sask.....	39.60	-28.00	12.84	0.85	369	189.9
Scott, Sask.....	42.00	-26.00	14.60	1.35	367	135.3
Lacombe, Alberta.....	54.80	-29.60	19.18	0.91	370	149.7
Lethbridge, Alberta.....	64.00	-33.00	26.58	0.89	370	177.3
Invermere, B.C.....	56.00	-10.00	27.50	0.67	369	157.3
Summerland, B.C.....	57.00	18.00	38.11	0.46	370	117.8
Agassiz, B.C.....	61.00	26.00	43.06	6.44	370	88.2
Sidney, Vancouver I., B.C.....	56.00	25.50	41.40	2.87	370	108.4

Ottawa, April 13, 1920.

E. S. ARCHIBALD,
Director, Experimental Farms.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Board of Agriculture reports (April 1) that March was a very favourable month for the farmer, being mild and generally dry. In the north and west, however, field work was hindered by rains during the last week of the month. Spring work is generally well forward, especially in the east, south and midlands, where the season is one of the earliest for many years. Grain sowing is well advanced and in many districts is nearly finished. The land has worked well, and good seed beds have been obtained. Germination has been very satisfactory, and the young crops have come up quickly and look healthy. Preparation of the land for potatoes is well in hand, and in the chief potato districts in the southern half of the country planting is in progress. On the whole, it is estimated that the area which will be planted with potatoes will be, if anything, rather above that of last year. Autumn-sown crops have improved with the genial weather. Wheat is forward, healthy, and very promising, there being very few unsatisfactory plants, but the area under this crop is estimated to be considerably less than a year ago. Winter oats and beans are also very satisfactory crops, and beans in particular appear to have improved. Seeds are still variable, but have done well. The plant is thin in many cases, but is improving, and prospects for the hay crop are better than a month ago. The crop is healthy and vigorous practically everywhere. Grass began to grow early and pastures are much more forward than is usual at this date. On warm land and in sheltered positions there is now some fairly good pasturage, but many stock are in the field, so that pastures, though green, are often bare. Live stock are improving and are healthy, but they still show the effects of the shortage of keep during the winter. The labour situation changes very little. In practically all districts the supply of workers is sufficient for requirements, and in a few it is plentiful, but farmers would welcome a larger proportion of skilled men.

Scotland.—The Board of Agriculture reports (April 1) that the weather during the first two or three weeks of March was favourable in most districts, but thereafter heavy rains were frequent, and outdoor work was more or less retarded owing to the heavy state of the soil. Taking the country as a whole, work is well forward and far in advance of the position as reported at this period last year. The reports on the wheat crop, in marked contrast to the varied reports received at this date last year, are all to the effect that the crop is strong, thick, and healthy. The area of winter sown wheat is expected to show a diminution of fully 10,000 acres. The acreage of spring wheat will perhaps be greater than usual, but not to such an extent as to affect the position materially.

India.—The Department of Statistics issued (March 16) the second wheat forecast for the season of 1919-20. This forecast, referring to 98.6 p.c. of the total wheat acreage of India, places the total area sown at 28,553,000 acres, as against 23,806,000 acres, the final area of last year; the present estimate shows therefore an increase of 20 p.c. as against 15.8 p.c. reported in February.

The second forecast of winter oilseeds (rape, mustard and linseed), issued on March 12, places the total area under rape and mustard at 3,563,000 acres, an increase of 599,000 acres, as compared with last year. The area under linseed is reported to be 2,323,000 acres, an increase of 433,000 acres. Broomhall (April 20) reports that good harvesting weather conditions prevail, and that the official bulletins are quite favourable. The crop of the United Provinces is reported to be one of the best ever raised.

European Countries.—Broomhall's Corn Trade News of April 20 reports that seeding conditions have been favourable in France, Germany, Italy, Spain, and Sweden.

United States.—The U.S. Bureau of Crop Estimates reports (April 8) that the average condition of winter wheat on April 1 was 75.6 p.c. of a normal, against 99.8 on April 1, 1919, 78.6 on April 1, 1918, and 84.1, the average condition for the past ten years on April 1. There was a decline in condition from December 1, 1919, to April 1, 1920, of 9.6 points, as compared with an average decline in the past ten years of 5.4 points between these dates. Upon the assumption of average abandonment of acreage and average influences on the crop to harvest, the condition on April 1 forecasts a production of about 483,617,000 bushels, which compares with 731,636,000 bushels, the estimated production in 1919, and 565,099,000 bushels in 1918. The average condition of rye on April 1 was 86.8 p.c. of a normal, against 90.6 on April 1, 1919, 85.8 on April 1, 1918, and 89, the average condition for the past ten years on April 1. The condition of rye forecasts a production of approximately 75,841,000 bushels; last year's estimated production was 88,478,000 bushels; the 1918 crop 91,041,000, and the average of the preceding five years 50,001,000 bushels.

Argentina.—According to a cablegram received on April 24 from the Canadian Trade Commissioner at Buenos Aires the yield of corn in the Argentine Republic for the season 1919-20 is 6,571,000 metric tons, equivalent to 258,688,000 bushels of 56 lb. per bushel.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

The International Crop Report of March, 1920, gives the areas sown to winter cereals in countries of the northern hemisphere for 1920, as compared with 1919, and the average of the five years

1914-18, the comparisons being expressed as percentages. Converted into acres, the figures are as in Table I.

I. Areas sown to Winter Cereal Crops in Countries of the Northern Hemisphere, 1919 and 1920.

Country.	1919.	1920.	Average 1914-18.
	p.c.	000 acres.	p.c.
Wheat—			
Belgium.....	101.0	304	—
Spain.....	96.8	10,051	99.6
France.....	103.5	11,369	89.5
Rumania (old Kingdom).....	44.5	1,321	28.1
Bessarabia.....	73.9	667	52.9
Bukovina.....	—	21	—
Canada.....	109.9	776	95.7
United States.....	76.8	38,770	96.5
Guatemala.....	101.8	22	—
British India.....	115.5	27,502	86.1
Japan.....	97.3	1,324	106.0
Algeria.....	110.0	2,002	—
Morocco.....	96.0	1,489	—
Tunis.....	116.3	1,384	103.8
Rye—			
Belgium.....	103.0	491	—
Spain.....	106.2	1,920	104.6
France.....	108.0	1,959	90.2
Rumania (old Kingdom).....	45.3	99	48.6
Bessarabia.....	53.9	217	49.1
Bukovina.....	—	39	—
United States.....	76.5	5,530	141.1
Barley—			
Belgium.....	101.0	80	—
Spain.....	100.3	4,265	110.5
France.....	135.3	346	116.7
Rumania (old Kingdom).....	—	25	21.6
Bessarabia.....	—	6	—
Japan.....	91.8	2,691	87.8
Algeria.....	107.0	1,952	—
Morocco.....	99.0	1,507	—
Tunis.....	116.3	1,137	103.2
Oats—			
Spain.....	98.7	1,574	112.3
France.....	111.0	1,833	101.9
Algeria.....	116.0	210	—
Morocco.....	84.0	6	—
Tunis.....	116.7	148	103.8

Table II shows the areas and yields of field crops in countries of the southern hemisphere for the year 1919-20, as compared with 1918-19 and the averages of the five years 1913-14 to 1917-18, with also percentage comparisons with 1918-19 and with the five-year average.

II. Areas and Yields of Cereal Crops in Countries of the Southern Hemisphere, 1918-19 and 1919-20.

Crops and Countries.	1918-19.	1919-20.	Five year Average 1913-14 to 1917-18.	Per cent of 1918-19.	Per cent of Average.
	000 acres.	000 acres.	000 acres.	p.c.	p.c.
Wheat—					
Argentina.....	16,976	14,957	16,420	88.1	91.1
Uruguay.....	840	721	880	85.8	81.9
Australia.....	8,649	7,413	10,546	85.7	70.3
Totals.....	26,465	23,091	27,846	87.3	82.9
Oats—					
Argentina.....	2,980	2,301	2,849	77.2	80.7
Uruguay.....	85	85	116	99.7	73.1
Totals.....	3,065	2,386	2,965	77.8	80.4
Flax—					
Argentina.....	3,417	3,522	3,818	103.1	92.2
Uruguay.....	51	68	69	132.2	98.2
Totals.....	3,468	3,590	3,887	103.5	92.3

Crops and Countries.	1918-19.	1919-20.	Five year Average 1913-14 to 1917-18.	Per cent of 1918-19.	Per cent of Average.
	000 bush.	000 bush.	000 bush.	p.c.	p.c.
Wheat—					
Argentina.....	184,270	214,142	149,333	116.2	143.4
Uruguay.....	6,890	5,734	7,560	83.2	75.8
Australia.....	80,836	44,000	114,894	54.4	38.3
Totals.....	271,996	263,876	271,787	97.0	97.1
Oats—					
Argentina.....	41,525	53,754	52,464	129.5	102.5
Uruguay.....	1,213	1,626	2,012	134.1	80.8
Totals.....	42,738	55,380	54,476	129.6	101.7
Flax—					
Argentina.....	27,755	42,085	28,158	151.6	149.5
Uruguay.....	498	689	480	138.2	143.2
Totals.....	28,253	42,774	28,638	151.4	149.4

The table shows that for wheat the yield for the three countries (Argentina, Uruguay and Australia) is 3 p.c. less than in 1918-19 and than the average. Oats show an increase for Argentina and Uruguay of 29.6 p.c., as compared with 1918-19 and of 1.7 p.c., as compared with the average. Flax for the same two countries shows an increase of about 50 p.c. over both the previous year and over the average.

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attach to the figures issued is attributable to the estimate that has to be made from the actual returns. In fact, any imperfection of the system is due to the extent to which farmers, whether from apathy, negligence or mistaken prejudice, make default. In proportion as the number of returns is increased and the necessity for estimation is in consequence reduced, will the risk of error be eliminated and the greater accuracy of the totals be established.

THE PROVINCE OF ALBERTA.

The Minister of Agriculture for Alberta has issued an illustrated pamphlet of 96 octavo pages, prepared by Mr. J. McCaig, Publicity Commissioner, and giving a survey of the topography, climate, resources, industries, etc., of Alberta. The Province measures, we are told, 750 miles from north to south, and in width varies from 200 to 450 miles. Its total area is 255,585 square miles, or 158,878,600 acres. Of this area, 1,510,400 acres are covered by lakes and rivers, leaving 157,368,260 acres of land. Putting the rough land of the eastern slope of the Rockies and other waste areas, and including also land that will require draining or other reclamation to bring it into use, at 76,068,260 acres, there remain 81,300,000 acres that can be easily converted into profitable agriculture. An area of agricultural land approximating 42,000,000 acres, or about half the ploughed land of the province, has been alienated for homesteads, pre-emptions, railway, Hudson's Bay, irrigation and school endowment lands. Of the other half, about 15,000,000 acres, including soldier settlement lands, is at present available for entry, chiefly in the central and northern parts of the province. The area of land owned by the irrigation companies of southern Alberta totals nearly 3,000,000 acres, of which 30 p.c. is actually irrigable. The pamphlet describes the cattle industry of the province, its production of dairy products, which reached last year the record value of \$31,625,000, and the production of sheep, swine and poultry. It deals also with the minerals and furs of the province. The education and Government systems are described, as well as the life in cities and towns. For details respecting these and other matters the pamphlet may be consulted profitably by all interested in the province.

THE CANADIAN WHEAT YIELD.

The "Review of the British Corn Trade" in the "Mark Lane Express" of April 19, 1920, has the following comment: "The area under spring wheat in the Dominion is about 18 million acres, and a rise to 20 millions is very likely with the return of 250,000 workers from the war. Bonuses are now more or less spent, and the climate makes for a keen life. We do not despair of Canadians picking their agriculture out of the mire; in fact, we believe they will do so. The ten bushels wheat crop is not worth growing, but what a depth of neglect is argued by such a yield! If Canada puts 20 million acres under spring wheat, in properly ploughed land, the

crop may be not ten, but 16 bushels. That would be 40 million quarters, and Canada, in the next cereal year would be able to say to the Mother Country: 'Treat your own farmers fairly. Give them four pounds a quarter for their wheat, and give us the same delivered at Mark Lane. We can meet the needs they have unsatisfied.' Canada can put wheat on Mark Lane at five pounds a quarter and prosper." It is not a true inference that 10 bushels per acre represents the average Canadian wheat crop. Whilst the Dominion has had four poor seasons in succession, and, owing to drought in the West, last year's Canadian wheat average did not exceed 10 bushels per acre, the annual average yield per acre of wheat in Canada for the ten years 1910-19 was $16\frac{3}{4}$ bushels and for the ten years 1909-18 it was $18\frac{1}{4}$ bushels. In the favourable season of 1915 the average was as high as 26 bushels. Undoubtedly the average wheat yield in Canada, favourable though it is as compared with that of other large grain-producing countries, is capable of substantial increase; but increased population, more abundant labour and additional capital for the wider application of mixed farming are essential factors. That under the special conditions of the country the farmers of Canada are not wanting in skill and energy is sufficiently demonstrated by the fact that during the war, with the army overseas and immigration arrested, the total wheat acreage was raised from 10,293,000 acres in 1914 to 19,126,000 acres in 1919.

THE WEATHER DURING MARCH.

The Dominion Meteorological Office reports that the temperature over a considerable portion of British Columbia and at a few points in the western provinces was slightly below the average, elsewhere in the Dominion it was above the average, Ontario registering the greatest positive departure, amounting to from 3° to 5° . The precipitation in British Columbia was nearly everywhere well above the average, with a heavy snowfall on the mountains, the Glacier in the Selkirks registering 84 inches of snow, which is 30 inches more than the average amount. In Cariboo also the snowfall was much heavier than usual. In the western provinces, precipitation was for the most part above the average, but in some few localities there was a deficiency, chiefly in southern Alberta and southwestern Saskatchewan. In Ontario, in the Lake Superior district, it was rather more than usual, as it was also at a few scattered points elsewhere, but over a large portion of the province there was a deficiency, and in many places to a marked extent. In Quebec, over the western half of the province, there was a small excess, with a deficiency over most of the eastern portion. In the Maritime Provinces in the vicinity of St. John and over the Annapolis Valley, there was a large excess, chiefly owing to the exceptionally heavy rainfall in those districts on the 13th; elsewhere, however, the amount fell short of the average by about one to two inches. The ground was bare of snow at the close of the month in southern and eastern Ontario, while in Nova Scotia and the southern

counties of Quebec only patches were reported. Over the greater part of the Prairie Provinces, and eastern Quebec and northern New Brunswick, there was a covering of from two to ten inches, while in the northern interior of British Columbia and in Temiskaming, in northern Ontario, it was from 20 to 40 inches deep.

PRICES OF AGRICULTURAL PRODUCE, 1920.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

(Furnished by the Board of Grain Commissioners for Canada.)

Grain and Grade.	March 6.		March 13.		March 20.		March 27.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
No. 1 hard.....	2 15	—	2 15	—	2 15	—	2 15	—
No. 1 Nor.....	2 15	—	2 15	—	2 15	—	2 15	—
No. 2 Nor.....	2 12	—	2 12	—	2 12	—	2 12	—
No. 3 Nor.....	2 08	—	2 08	—	2 08	—	2 08	—
No. 4 special.....	2 02	—	2 02	—	2 02	—	2 02	—
No. 5 special.....	1 91	—	1 91	—	1 91	—	1 91	—
No. 6 special.....	1 81	—	1 81	—	1 81	—	1 81	—
Feed.....	1 71	—	1 71	—	1 71	—	1 71	—
Oats—								
No. 2 C.W.....	0 96½—0 98½		0 97—0 98		0 99—1 01½		0 98—1 01½	
No. 3 C.W.....	0 92½—0 94½		0 94½—0 95		0 93—0 98½		0 94—0 97½	
No. 1 Feed ex.....	0 92—0 94½		0 94½—0 95		0 96—0 98½		0 94—0 97½	
No. 1 Feed.....	0 91—0 93½		0 96½—0 94½		0 95—0 96½		0 93—0 96½	
No. 2 Feed.....	0 90½—0 93		0 92½—0 93		0 93½—0 95½		0 92—0 95½	
Barley—								
No. 3 C.W.....	1 71—1 74		1 65½—1 70½		1 73½—1 75½		1 63—1 73	
No. 4 C.W.....	1 45—1 49½		1 47½—1 50½		1 54½—1 56½		1 42—1 53½	
Rejected.....	1 33—1 36½		1 34½—1 37½		1 40½—1 42		1 29—1 40	
Feed.....	1 33—1 36½		1 34½—1 37½		1 40½—1 41½		1 29—1 40	
Flax—								
No. 1 N.W.C.....	5 19—5 36½		5 31½—5 50		5 53—5 70½		5 05—5 56	
No. 2 C.W.....	5 08½—5 21		5 21½—5 42		5 43—5 65½		4 98—5 48	
No. 3 C.W.....	4 73½—4 81		4 86½—5 07		5 08—5 30½		4 38—4 98	

II. Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1919-20.

(From the Monthly Crop Report of the United States Department of Agriculture.)

Grade and Market.	December.		January.		February.		March.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red Winter, No. 2—								
St. Louis.....	2 40—2 50		2 60—2 84		2 40—2 77		2 50—2 68	
Chicago.....	2 38½—2 47		2 50—2 71		2 38—2 66		2 55—	
New York (f.o.b. afloat).....	2 75—2 80		2 65—		2 60—		2 60—2 85	
Corn, No. 2, mixed—								
St. Louis.....	1 50—1 55		1 50—1 56		1 44—		1 58—1 66	
Corn No. 2—								
Chicago.....	1 42—1 60		1 42—1 58½		1 33—1 56		1 50—1 69	
Oats, No. 2—								
St. Louis.....	0 78—0 86½		0 84½—0 92		0 82—0 91½		0 91—1 00½	
Chicago.....	0 75—0 85½		0 84½—0 91½		0 80—0 82		0 88—1 00	
Rye, No. 2—								
Chicago.....	1 50—1 82		1 66—1 85½		1 44—1 68½		1 59½—1 83½	

III. Range of Prices of Imported Grain and Flour at British Markets, 1920.

Mark Lane.	Feb. 2-23.		Liverpool.	Feb. 4— Mar. 9.		March 16-30.	
	\$ c.	\$ c.		\$ c.	\$ c.	\$ c.	\$ c.
Wheat—			Wheat—				
Canadian No. 1.....	2 29½	—	Nor. Man. No. 1.....	1 92½	—	3 00	—
Canadian No. 2.....	2 26½	—	Nor. Man. No. 2.....	—	—	2 96½	—
American spring.....	2 26½	—	Nor. Man. No. 3.....	—	—	2 93½	—
American hard winter...	2 29½	—	Red Winter No. 1....	1 89½	—	2 93½	—
American red winter...	2 23½	—	Hard winter No. 1....	1 92	—	2 96½	—
Durum.....	2 23½	—	Australian.....	1 94½	—	3 03	—
Australian.....	2 32½	—					
Argentine.....	2 26½	—					
Oats ¹ —							
Canadian.....	1 70½	—1 73					
American.....	1 47½	—1 50					
Chilian.....	1 68	—1 70½					
Flour—							
Canadian spring.....	11 25	—					
American spring.....	11 25	—					
American winter.....	11 25	—					
Australian.....	11 25	—					

¹ For February 2: Canadian, 1.62½—1.65½; American, 1.39—1.42; Chilian, 1.60½—1.62½

MARK LANE.

Variety.	March 1.		March 8.		March 15.		March 22.		March 29.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—										
Canadian No. 1.....	2 29½	—	2 29½	—	2 29½	—	2 76¾	—	2 76¾	—
Canadian No. 2.....	2 26½	—	2 26½	—	2 26½	—	2 73¾	—	2 73¾	—
American spring.....	2 26½	—	2 26½	—	2 26½	—	2 75¼	—	2 75¼	—
American hard winter...	2 29½	—	2 29½	—	2 29½	—	2 76¾	—	2 76¾	—
American red winter...	2 23½	—	2 17½	—2 23½	2 17½	—2 23½	2 73¾	—	2 73¾	—
Australian.....	2 32½	—	2 32½	—2 35½	2 32½	—2 35½	2 89¾	—	2 89¾	—
Argentine.....	2 26½	—	2 26½	—	2 26½	—	2 76¾	—	2 76¾	—
Oats—										
Canadian.....	1 70½	—1 73½	1 62½	—1 65½	1 62½	—1 65½	1 57¾	—1 60½	1 52½	—1 55½
American.....	1 47½	—1 50	1 47½	—1 50	1 47½	—1 50	1 47¾	—1 50	1 42½	—1 44½
Argentine.....	1 47½	—1 52½	1 50	—1 55½	1 50	—1 55½	1 47¾	—1 50	1 42½	—1 44½
Flour—										
Canadian spring.....	11 25	—	11 25	—	16 12	—	15 93	—	15 57	—15 93
American spring.....	11 25	—	11 25	—	16 12	—	15 93	—	15 57	—15 93
American winter.....	11 25	—	11 25	—	16 12	—	15 93	—	15 57	—15 93
Australian.....	11 25	—	11 25	—	16 12	—	15 93	—	15 57	—15 93

IV. Average Price of British-grown Grain, 1920.

(From the "London Gazette" as published pursuant to s. 8 of the Corn Returns Act, 1882.)

Week ended.	Wheat.		Barley.		Oats.	
	per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
February 7.....	72 6	2·205	103 9	3·030	53 9	1·557
February 14.....	72 7	2·208	102 1	2·981	59 9	1·583
February 21.....	72 7	2·208	100 7	2·937	60 0	1·590
February 28.....	72 6	2·205	98 1	2·864	59 5	1·574
Average.....	72 7	2·208	101 2	2·953	59 6	1·576
March 6.....	72 7	2·208	97 4	2·842	58 11	1·561
March 13.....	72 6	2·205	95 5	2·786	57 11	1·535
March 20.....	72 7	2·208	93 10	2·740	57 9	1·530
March 27.....	72 8	2·210	91 8	2·677	56 5	1·495
Average.....	72 7	2·208	94 7	2·761	57 9	1·530

SEEDING IN SASKATCHEWAN.

OTTAWA, May 18, 1920.—The Dominion Bureau of Statistics has received from the Statistics Branch of the Saskatchewan Department of Agriculture a telegram dated May 17, 1920, which states that 75 p.c. of wheat and 7 p.c. of oats seeding has been completed over all the province. Many districts have finished wheat seeding and almost all districts will finish this week. The moisture conditions are excellent and the germination is rapid, some wheat being three and four inches high.

Gov. Do
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Canada Statistical Bureau
JUL 25 1957
UNIVERSITY OF TORONTO

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OF

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May, 1920.

Published by Authority of the Right Hon. Sir George. E. Foster,
G.C.M.G., M.P., Minister of Trade and Commerce.



OTTAWA

THOMAS MULVEY

Printer to the King's Most Excellent Majesty

1920

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VOL. 13

OTTAWA, MAY, 1920

No. 141

DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. EDITOR: ERNEST H. GODFREY, F.S.S.
DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

FIELD CROPS OF CANADA.

Report for the month ended April 30, 1920.

This, the first crop report of the season of 1920, deals with the winter killing of fall-sown wheat, the condition of fall wheat and of hay and clover meadows and the progress of spring seeding, the report being compiled from the returns of crop correspondents from all parts of Canada on April 30.

WINTER KILLING AND CONDITION OF FALL WHEAT.

Notwithstanding the severity of the past winter, the proportion of fall-sown wheat that has been killed is reported to be very small, amounting in fact to not more than 4 p.c. of the area sown. This is the smallest proportion on record, and compares with 5 p.c. last year after an extraordinarily mild winter and with 52 p.c. in 1918 after the severe winter of 1917-18. The small proportion this year is due to the depth of the snow and the late spring, as usually fall-sown wheat in Canada is damaged more by alternating frosts and thaws during March and April than by cold in the depth of the winter when the ground is covered with snow. Deducting the areas reported as winter killed, representing 4 p.c., or 28,700 acres, in Ontario, 1 p.c. or 400 acres, in Alberta, and 4 p.c., or 600 acres, in British Columbia, the total reduction by winter killing is 29,700 acres, leaving 740,300 acres as the area of fall wheat to be harvested for 1920, as compared with 672,793 acres, the finally estimated harvest area of 1919. The average condition of fall wheat on April 30 last is 98, representing the promise of a yield 2 p.c. below the average of the ten years 1910-1919. Last year at the same date the condition was 3 p.c. above the average of the previous ten years. The condition on April 30 is 98 p.c. for both Ontario and Alberta and 95 p.c. for British Columbia.

HAY AND CLOVER MEADOWS.

About 5 p.c. of the area under hay and clover is reported as winter killed, as compared with 6 p.c. last year and 11 p.c. in 1918. The condition of hay and clover meadows on April 30 is reported as 95 p.c., or 5 p.c. below the average of the ten years 1910-19. By provinces, the condition is as follows: Prince Edward Island and Nova Scotia 100, New Brunswick 101, Quebec 98, Ontario 92, Manitoba 93, Saskatchewan 88, Alberta 96, and British Columbia 95.

PROGRESS OF SPRING SEEDING.

The seeding season this year is later than in any previous year since annual systematic records were begun by the Census and Statistics Office in 1910. In the Maritime Provinces, where seeding as a rule does not take place until May, work on the land, owing to cold, wet weather, will not begin until the second week of May. In Quebec, scarcely any seeding had been accomplished by the end of April, and, owing to cold and the absence of sunshine, operations were not expected to begin before the second week of May. The ground was reported as very moist, and several days' sunshine were requisite to get it into good condition. In Ontario, about 23 p.c., or nearly one quarter of the total seeding of wheat, and 19 p.c. of oats and barley, had been done by April 30; last year the proportions were 68 p.c. for wheat, 50 p.c. for oats and 49 p.c. for barley. In Manitoba and Alberta wet and cold weather and in Saskatchewan snowfalls and frosty nights have prevailed; so that in the Prairie Provinces very little seeding of wheat had been accomplished in April and practically none of oats and barley. Such a state of backwardness is rare in the Prairie Provinces, as usually from 40 to 50 p.c. of seeding is done in April. At the end of April, 1919, when the spring was also later than the average date, 40 p.c. of wheat had been sown in Manitoba, 62 p.c. in Saskatchewan and 77 p.c. in Alberta. In British Columbia 22 p.c. of wheat seeding had been done in April, as against 45 p.c. in April, 1919. Correspondents report generally an abundance of moisture in the ground, which, if the weather be favourable after seeding, should ensure rapid growth and carry the crops well on into June.

Dominion Bureau of Statistics,
Ottawa, May 14, 1920.

ERNEST H. GODFREY,
Editor.

I. Area sown to Fall Wheat, 1919, and Areas Winter-killed, as estimated on April 30, 1920.

Provinces.	Area sown 1919.	Area Winter-killed.		Area to be harvested
		acres.	p.c.	
Ontario.....	717,000	4	28,700	688,300
Alberta.....	38,400	1	400	38,000
British Columbia.....	14,600	4	600	14,000
Total.....	770,000	4	29,700	740,300

II. Comparative Statement of the Winter-Killing of Fall Wheat, 1910-20.

Provinces.	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Ontario.....	6	22	29	18	19	7	6	25	56	5	4
Alberta.....	22	5	39	44	16	6	5	15	10	7	1
Canada.....	—	21	32	26	18	7	5	24	52	5	4

III. Progress of Spring Seeding, April 30, 1912-20.

Crops and Provinces.	1912	1913	1914 ¹	1915	1916	1917	1918	1919	1920
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Spring wheat—									
Quebec.....	3	12	5	55	2	1	10	—	1
Ontario.....	13	22	24	73	4	28	68	29	23
Manitoba.....	50	57	57	93	26	13	94	40	6
Saskatchewan.....	72	65	79	94	36	5	85	62	4
Alberta.....	61	74	88	91	80	27	92	77	2
British Columbia.....	—	—	—	89	66	20	66	45	22
Six provinces.....	39	43	48	94	27	13	60	60	12
Oats—									
Quebec.....	4	11	4	38	1	1	6	—	—
Ontario.....	14	41	44	63	4	33	50	14	19
Manitoba.....	17	36	6	30	1	1	20	3	1
Saskatchewan.....	17	8	14	29	3	—	10	4	—
Alberta.....	30	25	39	50	24	3	28	16	1
British Columbia.....	—	—	—	73	56	11	54	29	18
Six provinces.....	14	21	23	45	8	12	24	9	9
Barley—									
Quebec.....	2	7	4	45	$\frac{1}{2}$	1	4	—	—
Ontario.....	12	36	41	63	3	26	49	12	19
Manitoba.....	—	$\frac{1}{2}$	1	8	—	—	7	5	1
Saskatchewan.....	23	1	3	13	$\frac{1}{2}$	—	7	1	1
Alberta.....	26	11	17	28	6	1	15	4	—
British Columbia.....	—	—	—	67	23	6	31	9	13
Six provinces.....	10	14	16	38	3	9	20	5	7
Total seeding—									
Quebec.....	5	12	6	41	2	1	7	—	1
Ontario.....	15	40	41	63	6	30	50	17	19
Manitoba.....	37	32	33	63	15	10	53	22	3
Saskatchewan.....	49	41	49	70	22	4	58	35	3
Alberta.....	52	43	51	67	46	16	61	43	1
British Columbia.....	—	—	—	77	58	24	63	24	15
Six provinces.....	28	35	37	63	18	14	44	30	10

¹ May 6, 1914.

IV. Condition of Hay and Clover Meadows, 1912-20.

NOTE.—100=Average of nine years, 1911-19.

Provinces.	1912	1913	1914 ¹	1915	1916	1917	1918	1919	1920
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Canada.....	86	103	100	105	106	99	97	99	95
Prince Edward Island.....	83	102	108	108	105	98	105	102	100
Nova Scotia.....	100	105	93	104	100	90	105	101	100
New Brunswick.....	88	98	100	99	101	103	102	101	101
Quebec.....	60	102	100	107	107	112	102	101	98
Ontario.....	94	104	99	107	111	96	92	98	92
Manitoba.....	101	107	107	102	105	100	80	99	93
Saskatchewan.....	98	101	104	93	99	102	102	94	88
Alberta.....	102	100	99	100	101	100	96	95	96
British Columbia.....	104	102	102	102	100	94	99	100	95

¹ May 6, 1914.

V. Condition of Fall Wheat, April 30, 1912-20.

NOTE.—100=Average of nine years 1911-19.

Provinces.	1912	1913	1914	1915	1916	1917	1918	1919	1920
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Ontario.....	92	108	105	120	116	87	68	103	98
Alberta.....	92	90	104	99	93	105	111	101	98
British Columbia.....	—	—	—	—	—	97	102	100	95
Canada.....	94	105	106	117	110	88	76	103	98

REPORTS FROM THE PROVINCES.

Summarized from Returns of Crop Correspondents, April 30, 1920.

Maritime Provinces.—The winter has been severe, considerable snow falling. Even in April snow fell to the depth of from 6 to 8 inches. On account of cold and wet weather, seeding, planting and work on the land will not begin before the second week in May. The delay is not altogether inopportune, as it will give farmers time for orchard pruning, ditching, etc. On account of the abundance of snow, grass roots were protected from the severe frost, and the ground was kept moist, thus giving promise of good hay and clover crops.

Quebec.—Farmers in general do not expect to commence seeding operations until about the 10th or 15th of May, as the weather during the latter part of April has been cloudy and very cold. Quite a quantity of rain and snow has fallen. The ground is in a very moist condition, and it will take several days of good sunshine to put it into proper shape. It is difficult at this early date to determine the amount of damage done to meadows, as in many places snow still covers the land, and there is little sign of verdure.

Ontario.—The spring has been very backward, and little work has been completed. Wet weather, accompanied by frosts at night, as well as snowfalls, has kept the ground in poor condition for seeding. Scarcely any ploughing has been done except on high, dry-land. Many meadows have been injured by frosts. In central and western Ontario fall wheat and clover are reported to be the best crop in years, but in northern, eastern and southern Ontario they are not so promising. Feed for live stock is very scarce and all animals are looking thin. Help is scarce and wages are high.

Manitoba.—The cold, wet weather of the past month has greatly delayed all spring work. A few farmers have harrowed their land to get it into a fit condition for seeding, but little seeding or planting has been done. Feed is very scarce, and some farmers complain of horses being in poor condition for spring work. Help is almost unobtainable, and wages are high.

Saskatchewan.—The spring has been an exceptionally late one with snowfalls during the month and frost at nights. In some places the snow had not gone at the end of April, and a great amount of water still lay on the land with sloughs, rivers and creeks overflowing. In very few places could work be commenced with ploughs or tractors. The outlook for an increased acreage of wheat is poor. The feed situation is acute in the north, and there are reports of many cattle dying.

Alberta.—The weather throughout the province has been very wet and cold. Land in many sections is still frozen and covered with snow, making it impossible for seeding operations to begin for a week or two. Where weather is milder some farmers have begun harrowing and disking, but on the whole all spring work is being held back. Numerous reports from northern Alberta state that cattle and horses are dying from lack of feed. The help question is still serious.

British Columbia.—The spring has been very backward, the greater part of April being much too wet and cold for seeding. In many places the frost has penetrated from 20 to 24 inches into the ground on account of the lack of snow last winter. There is plenty of moisture but little or no growth till the last week of April. Hay and clover appear to be in good condition. Fall wheat and clover suffered from the cold winter and lack of snow as protection.

CROP REPORTS OF PROVINCIAL GOVERNMENTS.

Ontario.—The Ontario Department of Agriculture reports (May 25) that grass has been improved by recent rains and warmer weather, but some representatives still regard pastures as being much behind, compared with average conditions at this time of year. Spring seeding and planting is being pushed along vigorously. In some counties the grain crops are practically all in. Essex reports that about half its corn crop was in by the end of the week. The land is said to be working well for the sowing of roots, speaking generally. An increased acreage of sugar beets is assured in the southwestern portion of the province. A considerable acreage of potatoes has already been planted, but potato seed was never harder to procure, and it has been very high in price. Hay is in strong demand, varying in price from \$24 to \$35 a ton. Fruit prospects, taken all together, are encouraging.

Manitoba.—The Manitoba Department of Agriculture reports (May 12) that everywhere in Manitoba the opening of spring was late. At only one or two points did seeding begin until Monday, April 26, and it could not be said to be general in a province-wide way until about one week later—say by Monday, May 3. In the northern parts of Manitoba it was a week later even than that. Everywhere the weather has been exceedingly favourable since the

field work began, and progress has been very rapid, so much so that in several of the earliest districts wheat sowing is practically finished, while, of course, it is only starting in the very latest places. Because of the early commencement of last winter, a good deal of ploughing has been necessary this spring. From every point the reports suggest that the land is in ideal condition to receive seed—mellow and warming up well with plenty of moisture below. With such weather, very prompt germination will occur, and early growth should be rapid. Correspondents generally forecast a lighter seeding of wheat than usual. Some expect an increase in some of the other cereals, while several observe a disposition on the part of farmers to slow down from the war-time pace of past few years, and to get along without too many high-priced helpers. The seed grain supply seems to have been adequate almost everywhere, and there is no suggestion of any curtailment of acreage on this account. Everywhere there has been a scanty supply of winter feed; mostly everywhere cattle are thin, and in some places horses are not in proper condition for hard spring work. In a few places more men are wanted for field work, but most correspondents report no difficulty in obtaining enough. Experienced men are averaging about \$75 and board.

Saskatchewan.—The Department of Agriculture reports (May 17) that 75 p.c. of the wheat seeding is completed. The weather has been ideal, and the land is in splendid shape for seeding operations.

Alberta.—The Alberta Department of Agriculture reports (May 15) that operations have been very active throughout the province with some delay from rain. A rather sharp rain occurred on May 11 which was pretty general and necessarily set back seeding operations. Progress in the south has been such that over 60 per cent of the wheat seeding is complete and about 30 per cent of the oats are sown. Seeding will be completed in ten days in southern Alberta except for feed. In central Alberta the progress has not been as rapid as in the south. At most points along the north and south lines only about 20 per cent of the seeding has been completed. Some delay has been caused by rains, and as there was little ploughing last fall it is going to take longer to put the crop in this spring. A good many are stubbling in their grain. Wheat seeding will be completed in central Alberta in four or five days. The Peace river country has been seriously delayed on account of rains on the tenth and eleventh. The land had not dried much before this date and the wet weather has left a great deal of the Peace river country too wet to work on. The delay by reason of wet weather is more serious in the north than it is in any other part of the province. General seeding conditions are not good in northern Alberta. There may be considerable seeding of barley and flax, but the oat seeding is still to do besides. All the rough stock of the country is now out rustling on last year's crop ground and native pastures. The supply of hay from outside, which has been brought in by the Provincial Government, is adequate to satisfy the demands of work stock. A favourable feature of the

British Columbia.—The Department of Agriculture telegraphed (May 28) the following estimate of areas sown in percentages of the areas of 1919: fall wheat 105, spring wheat 100, oats 104, peas 101, rye 111, beans 105, mixed grains 104, clover and timothy 103, alfalfa 104, fodder corn 120, green forage 107, potatoes 104, roots 103.

1	7 April 55	Alberta
2	7 April 55	Alberta
3	7 April 55	Alberta
4	7 April 55	Alberta
5	7 April 55	Alberta
6	7 April 55	Alberta
7	7 April 55	Alberta
8	7 April 55	Alberta
9	7 April 55	Alberta
10	7 April 55	Alberta
11	7 April 55	Alberta
12	7 April 55	Alberta
13	7 April 55	Alberta
14	7 April 55	Alberta
15	7 April 55	Alberta
16	7 April 55	Alberta
17	7 April 55	Alberta
18	7 April 55	Alberta
19	7 April 55	Alberta
20	7 April 55	Alberta
21	7 April 55	Alberta
22	7 April 55	Alberta
23	7 April 55	Alberta
24	7 April 55	Alberta
25	7 April 55	Alberta
26	7 April 55	Alberta
27	7 April 55	Alberta
28	7 April 55	Alberta
29	7 April 55	Alberta
30	7 April 55	Alberta
31	7 April 55	Alberta
32	7 April 55	Alberta
33	7 April 55	Alberta
34	7 April 55	Alberta
35	7 April 55	Alberta
36	7 April 55	Alberta
37	7 April 55	Alberta
38	7 April 55	Alberta
39	7 April 55	Alberta
40	7 April 55	Alberta
41	7 April 55	Alberta
42	7 April 55	Alberta
43	7 April 55	Alberta
44	7 April 55	Alberta
45	7 April 55	Alberta
46	7 April 55	Alberta
47	7 April 55	Alberta
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80	7 April 55	Alberta
81	7 April 55	Alberta
82	7 April 55	Alberta
83	7 April 55	Alberta
84	7 April 55	Alberta
85	7 April 55	Alberta
86	7 April 55	Alberta
87	7 April 55	Alberta
88	7 April 55	Alberta
89	7 April 55	Alberta
90	7 April 55	Alberta
91	7 April 55	Alberta
92	7 April 55	Alberta
93	7 April 55	Alberta
94	7 April 55	Alberta
95	7 April 55	Alberta
96	7 April 55	Alberta
97	7 April 55	Alberta
98	7 April 55	Alberta
99	7 April 55	Alberta
100	7 April 55	Alberta

WHEAT, 1920.

I. Dates of Seeding and Appearance above Ground of Spring Wheat, 1920

A. - DATES OF SEEDING.		Number of Records that Seeding was General.	
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31
32	32	32	32
33	33	33	33
34	34	34	34
35	35	35	35
36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
65	65	65	65
66	66	66	66
67	67	67	67
68	68	68	68
69	69	69	69
70	70	70	70
71	71	71	71
72	72	72	72
73	73	73	73
74	74	74	74
75	75	75	75
76	76	76	76
77	77	77	77
78	78	78	78
79	79	79	79
80	80	80	80
81	81	81	81
82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

Province.	Total No. of Replies.	Earliest Date when Seeding was General.	March	April	April	April	April
Quebec.	10.	April 20.					
Ontario	176.	March 23.					
Manitoba	60.	April 15.					
Saskatchewan	32.	April 21.					
Alberta	10.	April 27.					
British Columbia	78.	April 10.					

I. Dates of Seeding and Appearance above Ground of Spring Wheat, 1920.—con.**B.—DATES OF APPEARANCE ABOVE GROUND.**

Province.	Total No. of Replies.	Earliest Date of appearance above ground.	Number of Records of appearance above ground.				Average No. of days from seeding to appearance above ground.
			April 1-7.	April 8-14.	April 15-21.	April 22-30.	
Quebec.....	—	—	—	—	—	—	—
Ontario.....	22	April 15.....	—	—	5	17	17
Manitoba.....	1	April 25.....	—	—	—	1	10
Saskatchewan.....	—	—	—	—	—	—	—
Alberta.....	—	—	—	—	—	—	—
British Columbia....	3	April 25.....	—	—	—	3	10

II. Dates of Seeding and Appearance above Ground of Spring Wheat, 1919 and 1920.**A.—DATES OF SEEDING.**

Items.	Que.		Ont.		Man.		Sask.		Alberta.		B.C.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Number of records.....	—	10	365	176	250	60	159	32	78	10	14	8
Earliest date seeding general.....	—	April 20	Mar. 14	Mar. 23	April 14	April 15	April 1	April 21	April 1	April 27	April 1	April 10
Number of records seeding general:—												
April 1-7.....	—	—	41 ¹	16 ²	—	—	3	—	11	—	2	—
" 8-14.....	—	—	14	8	2	—	21	—	19	—	5	1
" 15-21.....	—	2	106	77	85	4	85	2	38	—	4	2
" 22-30.....	—	8	204	75	163	56	50	30	10	10	3	5

B.—DATES OF APPEARANCE ABOVE GROUND.

Number of records.....	—	—	55	22	14	1	31	—	35	—	9	3
Earliest date of appearance above ground....	—	—	April 1	April 15	April 26	April 25	April 20	—	April 10	—	April 14	April 25
Number of records of appearance above ground												
April 1-7.....	—	—	3	—	—	—	—	—	—	—	—	—
" 8-14.....	—	—	9	—	—	—	—	—	1	—	1	—
" 15-21.....	—	—	15	5	—	—	2	—	7	—	4	—
" 22-30.....	—	—	28	17	14	1	29	—	27	—	4	3
Average number of days from seeding to appearance above ground	—	—	15	17	9	10	12	—	12	—	8	10

¹ Including 22 in March.² Including 7 in March.

In Table II the records of Table I are compared with those obtained for the corresponding period of 1919. It will be observed from this statement that the number of records sent in this year is considerably less than last year, and it may be assumed that in the majority of cases there was little or nothing to be reported by those correspondents who did not reply. In Quebec there were no records of seeding during April, 1919, but in 1918 66 records showed seeding to be general during the last week and 12 during the third week of April. This

year there were 10 records of seeding being general in April, 2 during the week April 15-21 and 8 during the week April 22 to 30, whilst the earliest date was April 20. In Ontario, the earliest date for general seeding was March 23 in 1920 and March 14 in 1919. The records in the table for the first week of April include 22 in March, 1919, and 7 in March, 1920. In Manitoba the earliest dates for seeding were April 15, 1920, and April 14, 1919; but seeding was general in only four cases during the week April 15 to 21 as against 85 in 1919, and during the last week of April the records were 56 in 1920 as against 163 in 1919. In Saskatchewan only 32 records were received of general seeding in April and of these 30 were in the last week. In 1919, 159 records were received. In Alberta only 10 records were received and these during the last week of April, as compared with 78 in 1919. In British Columbia the records were only 8 as against 14 in 1919. The earliest date of the appearance of the crop above ground in Ontario was April 15 as against April 1 in 1919. In Manitoba the date was April 25 in 1920 and April 26 in 1919; but in Saskatchewan and Alberta no cases of germination were recorded during April. In British Columbia there were 3 cases in 1920 as against 9 in 1919. The average number of days from seeding to germination was in Ontario 17, as against 15 last year, in Manitoba 10, as against 9 and in British Columbia 10, as against 8.

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—April has been cold and wet, with a little more bright sunshine than usual. The highest temperature of the month is 68, the lowest 17·9, and the mean 40·2, while a year ago the maximum and minimum readings were 69 and 3, respectively, and the mean temperature 38·68. The precipitation, made up of 4·02 inches of rain and 2 inches of snow, totals 4·22 inches, recorded on sixteen different days; while in April, 1919, it amounted to 3·28 inches, recorded on fifteen days, and consisted of 2·83 inches of rain and 4·50 inches of snow. From 1911 to 1919, inclusive, the average April precipitation was 2·21 inches. The bright sunshine averages 6 hours a day, as against 5·2 hours a day for this time last year.

At the Ottawa Farm, grain seeding is probably about a week later than usual. The first of the field crops, consisting of about ten acres of peas and oats for green feed, was got in on April 22, while the regular sowing of grain started with oats on the 29th. In the Cereal Division, although a commencement was made on April 26 with the putting in of test plots of a few varieties of wheat, up to the close of the month it has been possible to get only very little seeding done.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—"The first half of April was fine, with the exception of a heavy rain on the 6th. From the 14th to the 19th, it was stormy, the sun showing

but once, and that only for a few moments, during this period. A heavy snowfall on the 19th gave good sleighing for two days, and blocked railway traffic for one afternoon. The remainder of the month has been stormy, with snowfalls from the 24th to the 26th. For a period of about ten days after the 19th there was a blanket of snow over the ground, which served to protect clover and grass from the spring frosts. The snow recorded during April aggregates 18.25 inches. At the close of the month, the prospect for hay is good, as both the new meadows and pastures have wintered well. The backward weather during the latter part of April has reduced the egg yields in the Charlottetown laying contest, due largely to dampness in the houses, which has necessitated changing the straw every week. Five new contest houses have been constructed, which should greatly help the contest work."

Kentville, N.S.:—W. S. Blair, Superintendent, reports:—"The temperature during April has been somewhat below normal, the mean being 38.14, as compared with 39.64 as the average for the previous six years. The precipitation totals 3.66 inches, made up of 7.50 inches of snow and 2.91 inches of rain, of which 0.84 of an inch was recorded on the 14th and 0.61 of an inch on the 24th. The sunshine aggregates 128.5 hours, as compared with an average of 134.3 hours for this time during the previous six years. Although April has been cold and somewhat dull, the ground at the end of the month is fairly dry, and a few days of fine weather should make it possible to go on the land. Work on dry orchard areas has been carried on toward the latter part of the month. Clovers and grasses have come through the winter well, and seem to be making an excellent start."

Nappan, N.S.:—W. W. Baird, Superintendent, reports:—"The weather during the first fortnight of April was quite seasonable, with frosts at night and fairly bright days and little precipitation. From the 16th to the 30th, conditions have not been so promising for an early spring, as it has been dull, with considerable rain and snow, thus delaying the drying up of the land. The highest temperature recorded is 60, the lowest 18 and the mean temperature 36.71; while a year ago the maximum was 60, the minimum 20 and the mean 38.65. The precipitation totals 3.74 inches, as against 3.26 inches in 1919; and the sunshine aggregates 138.9 hours, as compared with 94.3 hours in 1919. The price of eggs has dropped from seventy to forty cents a dozen; but market conditions for farm produce generally have remained fairly steady.

Fredericton, N.B.:—W. W. Hubbard, Superintendent, reports:—"On the whole the weather during April has been seasonable, although slightly cooler than usual, and with almost twice the average rainfall. The sunshine aggregates 159.7 hours, compared with 126 hours for the corresponding period of 1919 and a forty-five year average of 135.7 hours. With only six nights without more or less frost, conditions have been rather trying for grass lands and fall grains, and,

although the latter do not look very promising, there is not much evidence of injury to clovers and grasses. The land has remained cold and wet, and, excepting on sandy or gravelly soils, work on it has not been possible. All vegetation is backward, and fruit trees show practically no swelling of buds. The planting season is likely to be ten days later than usual. In spite of the scarcity and high prices of hay, live stock has come through the winter fairly well. At the Experimental Station, there has been an exceptionally good lamb crop, while the dairy herd is doing better than ever before."

Ste. Anne de la Pocatière, Que.:—Jos. Begin, Superintendent, reports:—"April has been cool, with more precipitation than usual,—the highest temperature recorded being 61, the lowest 22·6, and the mean temperature 37·2, compared with a maximum of 50·2, a minimum of 18·8 and a mean of 32·7 for April, 1919. The precipitation totals 6·07 inches, made up of 4·97 inches of rain and 1·10 inch of snow, recorded on sixteen days, compared with 4·94 inches, consisting of 3·54 inches of rain and 1·40 inch of snow in the corresponding period of last year. The bright sunshine averages 5·4 hours a day, as against 4·5 hours a day during April, 1919. This spring is one of the most backward ever experienced at this Station. The frequent rains and the wet snow have been favourable for the thawing of the ground, but, because of almost continuous precipitation, the ground is about as wet at the end of the month as it was at the beginning. In this section, even on the driest land, seeding has not been possible, although during the closing week of the month the Station has been able to put in about an acre of roots for seed on a well drained plot of gravelly soil. Considerable frost remains in the ground in spite of the heavy rainfall, for water pipes from five to six feet under ground remain frozen. It is not probable that sowing will be general for some time."

Cap Rouge, Que.:—G. A. Langelier, Superintendent, reports:—"The weather has been colder, wetter and duller than the average for April during the last eight years, the figures being, respectively, 35·9 and 37·81 for the mean temperature, 6·92 and 2·15 inches for the precipitation, and 139·7 and 172·7 hours for the sunshine. The crop of lambs has been good, with thirty-six living from twenty-one ewes; there are now nearly one hundred pure-bred Leicesters at the Station, which means one of the largest flocks in the province. In this district there has been practically nothing done on the land so far, and the spring is now considered late as regards putting in the crops."

Lennoxville, Que.:—J. A. McClary, Superintendent, reports:—"The weather throughout April has been dull and wet, and vegetation is very backward. The highest temperature recorded during the month is 65, the lowest 9, and the mean 38·01; compared with extremes of 68 and 15 and a mean temperature of 37·43 a year ago. The precipitation totals 4·62 inches, as against 2·68 inches last year."

The sunshine totals 136.7 hours, compared with 103.9 hours for the corresponding month in 1919. Ploughing commenced on the 15th, which is four days earlier than last year, but, owing to wet weather, no seeding has been done in this district yet."

Brandon, Man.:—W. C. McKillican, Superintendent, reports:—"April has been very cold and backward. During the first week below-zero temperatures were recorded nearly every night, the lowest being -9.5 on the 4th, and for each of three nights in succession a lower temperature for April was recorded than in any other year since the Farm was started. The mean temperature is 27, which is the lowest for many years. The weather has remained cool throughout April, and as a result it has been impossible to do any work on the land until the last few days of the month. Seeding was general by the 29th. The long winter has severely taxed the feed supply, and many farmers are rather short. At the Experimental Farm live stock has come through the winter in excellent condition; a fine lamb crop has arrived, but young pigs have not been so vigorous. Work on the land commenced April 28th, and seeding started the next day."

Indian Head, Sask.:—N. D. Mackenzie, Superintendent, reports:—"April has been very cold and backward, work on the land being almost impossible until towards the end of the month. Some ploughing and cultivating has been done in this district, but no seeding has taken place except on light, high land. Owing to the very backward spring, there has been very little feed outside for live stock; and the feed shortage in some sections has been acute."

Rosthern, Sask.—Wm. A. Munro, Superintendent, reports:—"The exceptionally long winter, which started with a snow storm on October 8, 1919, and which has continued for nearly seven months, has greatly aggravated the feed situation, which, primarily, has been due to the light crops of last year. Throughout Saskatchewan, many head of cattle are reported to have died on account of the feed shortage, which, owing to the difficulty of supplying adequate nourishment for horses to work, is expected to result in a large proportion of the crop being sown on stubble. The Station live stock, however, has come through the winter in good condition."

Scott, Sask.:—M. J. Tinline, Superintendent, reports:—"April opened with below-zero weather and it has continued quite cold up to the end of the month. The mean temperature, 25.97, is the lowest on record here for this period. By the 14th the ground was bare, but the surface soil was too wet to work; consequently, not before the last two or three days in the month were operations on the fields commenced. The backward spring, following the early autumn freeze-up, together with the shortage of feed for horses during seeding time, is likely to result in a decreased acreage of wheat and some slight increase in the acreage devoted to coarse grains. At the Station, the first date or seeding plots were put in on the 26th, while the variety plots of wheat were sown on the 30th."

Lacombe, Alberta:—B. C. Milne, Assistant to the Superintendent, reports:—"The weather during the first seven days of April was extremely cold, -24.1 being recorded on the 2nd. This makes the seventh consecutive month in which the thermometer dropped to -10 or lower. The mean temperature is 25.85 , which is, by several degrees, the lowest April record at this Station. Work on the land has not yet commenced. However, growth should be rapid once it starts, if warmer weather sets in, as the soil is well supplied with moisture. The roads have been in very poor condition, and, consequently, little marketing of grain or live stock has been done. Four-horse teams have been necessary to move what feed has had to be handled. Scarcity of feed throughout the province, while not affecting this district generally, is being felt by a number of farmers who under-estimated their requirements. Hay is selling at from \$50 to \$60 per ton and green feed at \$40 baled on cars. In this district, the oat supply has been pretty well cleaned up, and feed oats are worth about \$1 a bushel. Live stock losses have been rather heavy in the eastern and north-eastern sections of central Alberta, while only isolated cases are reported in the Lacombe district."

Lethbridge, Alberta:—W. H. Fairfield, Superintendent, reports:—"April this year has been remarkable on account of its heavy precipitation, amounting to 4.37 inches, which is nearly three times as much as has ever been recorded for this month since meteorological records have been kept at Lethbridge; while the average precipitation for April for the last eighteen years is 0.62 of an inch. Although this unusual amount of moisture at this season of the year has been very acceptable in those parts of southern Alberta which have suffered from drought for the past three seasons, still, the inability of farmers to work on the land is causing them some apprehension. There have not been more than three days in the entire month when it has been possible to get on the land. In the Calgary district, and adjacent to the mountains, down to and including the Cardston and Spring Coulee districts, no work whatsoever has been done. In a few localities farther east, seeding was started, but all told it could not possibly reach 5 per cent. However, with favourable weather during May, it is still possible for farmers in southern Alberta to get most of their seeding done in time. At the end of the month, the feed situation is a little easier, as hay from outside points appears to be coming in more freely."

Invermere, B.C.:—R. G. Newton, Acting Superintendent, reports:—"Meteorologically, April has been a month of extremes. The mean temperature, 38.3 , is much below the average; the precipitation, 1.26 inch, is the heaviest on record; while the amount of sunshine, 150.8 hours, is the lowest since records have been kept. No work has been done on the land, with the exception of some ploughing in the garden. In this district wages are rising rapidly, and men are scarce. The prices of feeds are still advancing, while seed potatoes are quoted at \$100 per ton."

Summerland, B.C.:—R. H. Helmer, Superintendent, reports:—"April has been exceptionally cool, the mean temperature being five degrees lower than in the two previous years. The precipitation totals 1.63 inch, which includes 0.5 of an inch of snow and 1.58 inch of rain, nearly all of the latter being recorded on the 9th, 16th and 30th. This has put the land in good condition for all crops, and irrigation will be on by May 15. All orchards visited show every sign of abundant yields, and the fruit growers of the Okanagan valley feel satisfied with the prospects. Hay is practically unobtainable in the valley just now. More spraying is being done than ever before in this section, and many power sprayers have been secured this season. There is a great demand for seed potatoes, and it is feared that a good deal of very poor seed is being planted. The roads are dry and in fair shape, but need much attention in the sandier parts. Crop prospects in the valley are very promising."

Agassiz, B.C.:—W. H. Hicks, Superintendent, reports:—"Following March, with 6.44 inches of precipitation, comes April with 9.95 inches, which is the greatest April rainfall since records have been kept at the Farm, while the average for the last twenty-nine years is 4.63 inches. Not only has the weather been extremely wet, but, as a rule, it has been cool, and fresh snow has fallen on Mount Cheam right up to the close of the month. These conditions have made the spring a very backward one, although much work was accomplished on the land between rains. The hay and pasture fields have late, short crops. Some of the early sown cereals are well above ground, as are also some garden crops. Warm weather is needed now to expedite growth. In spite of the high prices of feeds, live stock, generally speaking, is in good condition. There has been an unusual demand for farm horses, dairy cattle, and young pigs."

Sidney, Vancouver Island, B.C.:—Lionel Stevenson, Superintendent, reports:—"On the whole, the weather conditions which have prevailed during April have been favourable as regards land tillage operations. Very little frost has been experienced, while both the rainfall and the bright sunshine recorded aggregate more than usual. During the early part of the month the temperature of the soil was low, and, consequently, growth was slow. Oats, spring wheat, cereal-forage crops, early potatoes, garden crops and new berry plantations have been got in under promising conditions. Hay and pasture meadows are backward in this locality; but alfalfa, where grown, has made good growth. Orchard fruit trees have been well covered with bloom, and conditions have been favourable for the setting of the fruit. Plantations of strawberry and other small fruits have made satisfactory growth and look promising. In this district live stock has improved on spring pasture; dairy cows are in demand; and a considerable increase has taken place in the number of sheep kept. Poultry also is on the increase, and is in good demand."

Meteorological Record for April, 1920.

The records of temperature, precipitation and sunshine at the several Experimental Farms and Stations for the month of April are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature F.			Precipitation in inches.	Hours of Sunshine.	
	High-est.	Low-est.	Mean.		Pos-sible.	Actual.
Ottawa, Ont.....	68.0	17.90	40.20	4.22	406	180.2
Charlottetown, P.E.I.....	58.00	20.00	35.72	4.66	408	150.7
Kentville, N.S.....	61.00	17.00	38.14	3.66	405	128.5
Nappan, N.S.....	60.00	18.00	36.71	3.74	407	138.9
Fredericton, N.B.....	64.50	15.00	38.50	4.63	407	159.7
Ste. Anne de la Pocatière, Que.....	61.00	22.60	37.20	6.07	409	162.4
Cap Rouge, Que.....	61.00	17.20	35.90	6.92	409	139.7
Lennoxville, Que.....	65.00	9.00	38.01	4.62	406	136.7
Brandon, Man.....	55.00	— 9.50	27.00	0.21	414	229.5
Indian Head, Sask.....	53.00	—10.00	26.63	0.53	416	137.6
Rosthern, Sask.....	49.80	—11.00	26.25	0.60	419	237.5
Scott, Sask.....	51.20	—20.80	25.97	0.61	418	175.4
Lacombe, Alberta.....	50.80	—24.10	25.85	2.23	420	100.3
Lethbridge, Alberta.....	65.00	— 4.00	30.59	4.37	413	103.0
Invermere, B.C.....	66.00	16.00	38.30	1.26	415	150.8
Summerland, B.C.....	72.00	19.00	43.70	1.63	414	142.8
Agassiz, B.C.....	74.00	27.00	47.31	9.95	413	116.3
Sidney, Vancouver I., B.C.....	61.50	30.00	44.24	1.45	411	215.0

Ottawa, May 18, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Board of Agriculture reports (May 1) that the weather of April was very unfavourable for field work; rains were almost continuous, and the land became very wet. Conditions during the last week of the month were somewhat better, especially in the north. Spring sowing, which was very well advanced a month ago, is now backward in most districts, as very little was possible during April. In practically all parts of the country, except the eastern counties, much grain still remains to be sown. The crops which were sown early have generally germinated satisfactorily, and there are good plants as a rule, but all need more sun. In some of the southern and eastern counties spring oats and barley have suffered a certain amount of damage from wireworm. Wheat has lost colour and plant on heavy and low-lying land, and it is not so promising as a month ago, but on high, light land it has come through the wet weather well. Winter oats are still promising, and beans are also generally satisfactory, though many fields of the latter are now full of weeds. The supply of labour is up to requirements in practically all parts of the country, though the scarcity of skilled men is still being felt.

India.—The Indian Department of Statistics reports (April 5) that the total revised area for all India sown to wheat is 28,921,000 acres, instead of 28,553,000 acres, as reported last month. The finally revised area for 1919 was 23,806,000 acres; so that there is an increase this year of 4,747,000 acres, or 20 p.c., in the area under wheat. Broomhall (May 11) states that the production will be 368,000,000 bushels, as against 280,000,000 bushels last year.

France.—The French Department of Agriculture publishes the following report on the condition of crops on April 1, 1920, as compared with April 1, 1919, the latter being placed within brackets: Winter wheat 76 (66); meslin 73 (66); rye 77 (68); winter barley 76 (66); winter oats 78 (65). Scale: 100 = very good, 80 = good, 60 = fairly good.

United States.—The Crop Reporting Board of the U. S. Department of Agriculture reported (May 8) that on May 1 the area of winter wheat to be harvested was about 34,165,000 acres, or 4,605,000 acres (11.9 p.c.) less than the acreage planted last autumn and 15,740,000 acres (31.5 p.c.) less than the acreage harvested last year, viz., 49,905,000 acres. The ten-year average of abandonment of planted acreage is 11.2 p.c. The average condition of winter wheat on May 1 was 79.1, compared with 75.6 on April 1, 100.5 on May 1, 1919, and 87.1, the average for the past ten years on May 1. A condition of 79.1 p.c. on May 1 is indicative of a yield per acre of approximately 14.2 bushels, assuming average variations to prevail thereafter. On the estimated area to be harvested, 14.2 bushels per acre would produce 484,647,000 bushels, or 33.8 p.c. less than in 1919, 14.2 p.c. less than in 1918, and 17.4 p.c. more than in 1917. The out-turn of the crop will probably be above or below the figures given above according as the change in conditions from May 1 to harvest is above or below the average change. The average condition of rye on May 1 was 85.1, compared with 86.8 on April 1, 95.4 on May 1, 1919, and 90.5, the average for the past ten years on May 1. The condition on May 1 forecasts a production of about 79,789,000 bushels, compared with 88,478,000, last year's final estimate, and 91,041,000, the 1918 final estimate. The average condition of meadow (hay) lands on May 1 was 89.4, compared with 94.3 on May 1, 1919, and a ten-year average on May 1 of 89.0. The expected hay acreage in 1920 is about 71,752,000 acres (56,191,000 tame and 15,561,000 wild). The May 1 forecast is 111,831,000 tons, compared with an estimated production of 108,666,000 tons in 1919, and 91,139,000 tons in 1918. Stocks of hay on farms on May 1 are estimated as 11,377,000 tons (10.5 p.c. of crop), against 8,559,000 tons (9.4 p.c.) on May 1, 1919, and 11,589,000 tons (11.6 p.c.), the five-year average on May 1. The average condition of pastures on May 1 was 79.8, compared with 90.3 on May 1, 1919, and a ten-year average on May 1 of 85.5. Of spring ploughing 60.1 p.c. was completed up to May 1, compared with 72.7 p.c. on May 1, 1919, and a ten-year average on May 1 of 71.4. Of spring planting 50.2 p.c. was completed up to

May 1, compared with 61 p.c. on May 1, 1919, and a ten-year average on May 1 of 59.

The Monthly Crop Reporter for May, 1920, states that according to reports of May 1, received by field agents, fewer acres will be planted with potatoes this year than last in important producing states. New York reports the intention to plant 97 p.c. of last year's acreage, Michigan 90, Wisconsin 95, Minnesota 89, Colorado 94, Idaho 95 and California 110. Reports also show an intention to plant only 71 p.c. as large a bean acreage as last year in the main bean producing States.

COLLECTION OF AGRICULTURAL STATISTICS, 1920.

In the Monthly Bulletin of April were described in some detail the arrangements for the collection of this year's annual agricultural returns as undertaken by the Dominion Bureau of Statistics and the Provincial Departments of Agriculture. It is desirable again to draw attention to the importance of these returns and to impress upon all who are in official relations with farmers, and especially the crop correspondents of the Bureau, that they should do their utmost to secure the return of the simple information required. The cardboard schedule, copies of which are being distributed during the present month, calls for (a) the areas sown this year to the principal field crops, and (b) the numbers of each description of farm live stock (classified by ages in the case of horses and cattle) on the farm at the date of collection in mid-June.

The cards are being distributed to farmers through the agency of the rural school teachers and school children, who in the two or three years that the system has been in operation have shown praiseworthy intelligence and zeal. The co-operation of the schools indeed furnishes the occasion for a valuable object lesson of a practical character, stimulates the patriotism of scholars and helps to train them to understand the importance of the statistics required and to take their share in furnishing them when they themselves shall have succeeded to the practical business of farming.

In these days of diminished food supplies, the demand for accurate statistics of production is increasingly insistent, and it is of the highest importance that Canadian food producers and distributors should know as accurately as possible where the country stands in relation to world supplies. This knowledge can only be gained by securing statistics that can be trusted. It is therefore confidently expected that the farmers of Canada, who have during the strenuous years of the great war risen so nobly to the demands made upon them for increased production, will not fail to perform the simple duty of filling up the annual schedule now in course of distribution. Any farmer who does not receive the cardboard schedule by the middle of June should apply for one either to the school teacher in his school

district, to the Agricultural Department of his province, or to the Dominion Bureau of Statistics at Ottawa. In British Columbia, the cards are being mailed direct to each farmer.

MAPLE SUGAR INDUSTRY IN CANADA.

The Department of Agriculture has just published a revised edition of the illustrated pamphlet on the Maple Sugar Industry by Mr. J. B. Spencer, B.S.A., which was originally brought out in 1913. In describing the extent and importance of the maple sugar industry, it is stated that from 1850 to 1880, according to Dominion statistics, the production of maple sugar, together with its equivalent in syrup, increased year by year, but since that time it has steadily fallen. The average yearly production from 1851 to 1861 was about 13,500,000 lb.; from 1861 to 1871 about 17,500,000 lb.; from 1871 to 1881 19,000,000 lb.; from 1881 to 1891, an average of 22,500,000 lb. was reached. During the next decade the yearly average fell to some 21,200,000 lb., while in more recent years it has dropped to little less than 20,000,000 lb. Even though a decrease in production is being experienced, the industry still bulks large, and with the more general use of modern methods and proper encouragement there is no reason why it should not return to and even surpass the high figures of the 'eighties. The industry is confined in Canada to Quebec, Ontario, New Brunswick, and Nova Scotia. In the Maritime Provinces the yearly output has rarely exceeded half a million lb. Quebec turns out about 14,300,000 lb., and Ontario 5,000,000 lb. per year. It is estimated that the industry, which represents an annual value of almost two million dollars, is carried on by about 50,000 growers.¹

The early statistics quoted above were communicated by the late Dr. Archibald Blue, when Chief Officer of the Census and Statistics Office, to the 13th Annual Forestry Convention, held at Ottawa, February 7-8, 1912. At the Census of 1911, the production of maple sugar in Quebec represented 95 p.c. of the total for the Dominion, and it is probable that a similar proportion still applies annually. The yield and value in 1910 of maple products in Canada, according to the Census of 1911, was by provinces as follows:

Province	Maple Sugar.	Maple Syrup.
	lb.	gallons
Nova Scotia.....	100,005	8,941
New Brunswick.....	143,779	19,410
Quebec.....	9,993,117	1,007,770
Ontario.....	251,088	766,337
Other provinces.....	351	123
Total.....	10,488,340	1,802,581

¹ Census and Statistics Monthly, January, 1912 (Vol. 5, No. 44, pp. 26-27).

The total value in 1910 of maple sugar and syrup, according to the Census of 1911, was \$2,587,413, distributed by provinces as follows: Nova Scotia, \$19,336; New Brunswick, \$38,223; Quebec, \$1,698,279; Ontario, \$831,478; and other provinces, \$97.

There are at present no annual statistics for the whole of Canada of the production of maple sugar and maple syrup, but for the province of Quebec annual statistics, collected by the system jointly applied by the Dominion and Quebec Statistical Bureaux, have been published since 1918, as follows:

	1918	1919
Maple Sugar.....	10,173,622 lb.	12,157,498 lb.
Maple Syrup.....	1,928,201 gallons.	1,470,775 gallons.

The value of maple products in Quebec in 1919 was estimated at \$6,348,605, as compared with \$4,418,344 in 1918.

Apart from farm production, the Census of Industry for 1918 showed the following production by manufacturing establishments of maple sugar, maple syrup, etc., in the year 1917:

Product	Province	Quantity	Value	Total Value
		gallons	\$	\$
Maple syrup.....	Quebec....	31,747	87,318	—
“.....	Ontario...	12,000	24,177	111,495
		lb.		
Maple sugar.....	Quebec....	202,000	48,873	—
“.....	Ontario...	100,000	28,000	76,873
Miscellaneous (butter, syrup and confectionery).....	Quebec....	—	497,670	—
“.....	Ontario....	—	172,461	670,131
Total value.....		—	—	858,499

PRODUCTION OF DAIRY FACTORIES, 1919.

The Dominion Bureau of Statistics issued on May 31, 1920, a preliminary statement of the production of the dairy factories of Canada for the year 1919. This statement shows that the total number of dairy factories in operation during the year 1919 was 3,343, that the total production in 1919 of creamery butter was 101,554,131 lb., of the value of \$55,182,422, as compared with 93,298,348 lb., of the value of \$41,859,156 in 1918, and that the total quantity of cheese made in 1919 was 167,734,982 lb., of the value of \$44,805,794, as compared with 174,878,313 lb., of the value of \$39,456,532 in 1918. The average wholesale price of creamery butter in 1919 for the Dominion was 54 cents per lb., as compared with 45 cents in 1918, and of cheese 26½ cents per lb., as compared with 22½ cents in 1918.

Condensed milk shows an increase in production over the previous year, being 61,898,303 lb., valued at \$9,425,076 in 1919, and 40,700,209 lb., valued at \$5,711,174 in 1918. Evaporated milk on the other hand shows a decrease, being 16,107,934 lb., valued at \$1,789,089, in 1919, and 38,612,367 lb., valued at \$4,048,055, in 1918. The quantity of milk powder made in 1919 was 6,591,099 lb., valued at \$1,539,272, and in 1918 it was 5,530,915 lb., valued at \$1,388,248.

Other products of dairy factories in 1919 comprised whey butter (all in Ontario) 1,396,814 lb., valued at \$661,373; casein 199,013 lb., valued at \$32,588; sterilized milk, 7,460,400 lb., valued at \$852,080; skim condensed milk, 494,973 lb., valued at \$32,921; ice cream sold 2,892,974 gallons, valued at \$3,715,488; whole milk sold, 22,398,786 gallons, valued at \$10,377,292; cream sold 6,380,727 lb., of butter fat, valued at \$4,718,678; and miscellaneous items of buttermilk, whey cream and whey to the value of \$521,420.

In Table I the production and value of creamery butter and factory cheese for all Canada is compared for the years 1900, 1907 and 1910 and 1915-19:

I.—Production and Value of Creamery Butter and of Factory Cheese, 1900, 1907, 1910, 1915-19.

Year	Establishments	Creamery Butter		Factory Cheese	
		No.	lb.	lb.	\$
1900.....	3,576	36,066,739	7,240,972	220,833,269	22,221,430
1907.....	3,515	45,930,294	10,949,062	204,788,583	23,597,639
1910.....	3,625	64,698,165	15,645,845	199,904,205	21,587,124
1915.....	3,513	83,991,453	24,385,052	183,887,837	27,097,176
1916.....	3,446	82,564,130	26,966,355	192,968,597	35,512,622
1917.....	3,418	87,526,939	34,274,218	194,904,336	41,180,623
1918.....	3,373	93,298,348	41,859,156	174,878,313	39,456,532
1919.....	3,343	101,554,131	55,182,422	167,734,982	44,805,794

NOTE.—The figures for 1919 are subject to revision.

It will be observed from this table that there has been, except in 1916, a continuous annual increase in the production of creamery butter, and that the quantity has risen from 36,066,739 lb., in 1900 to 101,554,131 lb., in 1919. Cheese, on the other hand, has, except in 1916 and 1917, steadily declined, the production falling from 220,833,269 lb., in 1900 to 167,734,982 lb. in 1919. Owing to the rising prices, the values of both articles have gone up, the value of creamery butter, as well as its quantity, being the highest on record, whilst for cheese the total value, in spite of decreased quantity, is also the highest on record. The value of creamery butter is nearly eight times and of cheese more than double the total of 1900.

Table II shows, for the years 1917, 1918 and 1919, the total quantities and values of miscellaneous dairy products, many of which have shown remarkable development during the last few years.

II.—Production and Value of Miscellaneous Dairy Products, 1917-19.

Product	1917	1918	1919	1917	1918	1919
				\$	\$	\$
Whole milk sold,gal.	15,062,945	18,986,646	22,398,786	5,917,544	8,568,966	10,377,292
Condensed milk,lb.	32,105,799	40,700,209	61,898,303	3,811,281	5,711,174	9,425,076
Skim condensed milk, lb.	127,820	495,395	494,973	6,391	29,724	32,921
Evaporated milk,lb.	29,415,012	38,612,367	16,107,934	2,635,952	4,048,055	1,789,089
Milk powder,lb.	3,979,514	5,530,915	6,591,099	817,287	1,388,248	1,539,272
Whey butter,lb.	727,075	891,543	1,396,874	247,757	354,675	661,373
Casein,lb.	180,023	243,763	199,013	28,337	40,854	32,588
Cream sold, lb. of butter fat.	4,613,834	4,616,449	6,380,727	2,545,327	2,943,790	4,718,678
Ice cream sold,gal.	2,000,761	2,033,190	2,892,974	2,200,360	2,517,435	3,715,488
Sterilized milk,lb.	—	—	7,460,400	—	—	852,080
Miscellaneous	—	—	—	214,249	422,241	521,420
Totals	—	—	—	18,424,485	26,025,162	33,664,277

NOTE.—The figures for 1919 are subject to revision.

The total value of the products of dairy factories in 1919 was \$133,653,493, comprising creamery butter \$55,182,422, cheese \$44,805,794 and miscellaneous dairy products \$33,665,277. The total for 1919, viz., \$133,653,493, compares with \$107,340,850 in 1918 and \$93,879,326 in 1917.

BRITISH EMPIRE STATISTICAL CONFERENCE, 1920.

From January 20 to February 26, 1920, was held at the offices of the Board of Trade, London, England, the first Conference of Government Officers engaged in dealing with Statistics in the British Empire, and the Report and Resolutions of this Conference have now been published by the British Government [Cmd. 648]. Altogether 41 representatives of Home, Dominion and Colonial Governments attended the Conference under the chairmanship of Mr. A. W. Flux, of the British Board of Trade, the Canadian delegates being Mr. R. H. Coats, Dominion Statistician, and Mr. Ernest H. Godfrey, of the Dominion Bureau of Statistics. The work of the Conference covered practically the whole field of official statistics, and in detail was divided amongst 10 committees, including one for agricultural production.

The Conference recommended that there should be established in London, at the earliest possible moment, a Central Bureau of Statistics for the British Empire, adequately equipped and staffed, for the purpose of obtaining, collating, examining and publishing statistics which bear upon the conditions and resources of the Empire, the common interests of its members and their relations with the rest of the world. It is proposed that the Bureau should be controlled by a Special Council established by Royal Charter. The report goes further into detail respecting the proposed Bureau, and also presents

a series of resolutions respecting all the different branches of official statistics which came under consideration.

For the purposes of the Monthly Bulletin, the resolutions of the Conference in respect of agriculture are set out below:—

The Conference recommends that—

- (1) In view of the high importance of statistics of agricultural production in regard to food and raw materials, it is desirable that the various countries of the Empire should attempt the systematic collection annually of statistics of areas devoted to agricultural and pastoral production, numbers of live stock and, as far as practicable, of agricultural and pastoral productions.
- (2) The systematic collection of statistics regarding the forest areas in the various countries, as far as ascertainable, and of the annual out-turn of timber and all other forest produce, should similarly be attempted.
- (3) Where and so far as complete annual returns of production may not be practicable, the annual statistics should be supplemented by a complete census of the total quantity and value of agricultural and pastoral production at least once in five years.
- (4) Prices quotations of agricultural produce and statements of crop movements during the season should be collected periodically at appropriate intervals in all parts of the Empire, the frequency and basis of the record to be arranged in agreement with the proposed British Empire Statistical Bureau.
- (5) Crop forecasts should, where possible, be made for the more important crops in each part of the Empire.
- (6) The British Empire Statistical Bureau should not merely collate and tabulate the material received under the foregoing resolutions, but should also undertake its co-ordination, analysis and publication with such reports thereupon as may be found desirable.
- (7) The various Governments should, so far as possible, obtain for official use and for transmission to the proposed statistical bureau, periodical returns of stocks of the principal agricultural and pastoral products and the course of supplies; such statistics should not be published without the consent of the Governments concerned.
- (8) On the formation of a Central Bureau of Statistics for the British Empire, immediate steps should be taken to secure:
 - (i) definite information and statistics as to:
 - (a) the main outlines of systems of land tenure and land settlement;
 - (b) systems of irrigation; and
 - (ii) estimates of the extent of land capable of being brought into agricultural and pastoral use,
 and that the Central Bureau in publishing this information in a co-ordinated form should present a general analysis and survey of the statistics available, the systems in vogue, and generally in regard to questions affecting the occupation and development of the land viewed from the broad standpoint of the British Empire.
- (9) Returns of the total value of the agricultural and pastoral production of each part of the Empire are required to enable calculations to be made of:
 - (a) the value of the products to the producer;
 - (b) the commercial value of the products to the country.
- (10) The year to which the quinquennial census relates should be, so far as possible, the same for all parts of the Empire, and it is suggested that the 12 months commencing 1st September, or the agricultural year most nearly approximating to that period in each country, should be generally adopted.
- (11) A quinquennial agricultural census should in any case coincide, so far as possible, with a population census, and that a quinquennial census should, if possible, be taken throughout the Empire for the year 1920-21, and if that is impracticable in 1921-22, the following census to be taken in any case in 1925-26.

Those who have followed recent developments and especially the work since 1918 of the present Dominion Bureau of Statistics will recognize that many of the foregoing requirements are either already met by Canada, or are in process of being so. Especially be it noted that since 1917 the Bureau, in co-operation with the Provincial Governments, has organized a system for the annual collection of areas under field crops and of the numbers of farm live stock, which if applied vigorously will, it is hoped, eventually secure the cohesion and the practical co-operation of the great body of Canadian

farmers. Should the Parliament of Canada provide for the extension of the quinquennial census of population and agriculture of the Prairie Provinces to the whole of Canada, in accordance with the recommendations of the Conference, the agricultural statistics of the Dominion, should, without doubt, speedily attain to a very high degree of perfection.

THE WEATHER DURING APRIL.

The Dominion Meteorological Office reports that the temperature was below the average throughout the Dominion, the negative departure being especially pronounced in the western provinces, where it ranged from 9° to 14°. In British Columbia and Ontario the deficiency was from 3° to 6°, and in Quebec and the Maritime provinces from 1° to 2°. In British Columbia the precipitation was above the average, except in a few scattered localities. In the western provinces there was an excess in southern Alberta, and a deficiency elsewhere, especially in Manitoba. In Ontario there was a little less than usual in the Lake Superior district and at a few other points, but over the greater portion of the province the average amount was exceeded. In Quebec and the Maritime Provinces there was an excess in all localities.

PRICES OF AGRICULTURAL PRODUCE, 1920.

I.—Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

(Furnished by the Board of Grain Commissioners for Canada.)

WHEAT (April): No. 1 Hard and No. 1 Nor., \$2.15; No. 2 Nor., \$2.12; No. 3 Nor., \$2.08; No. 4 Special, \$2.02; No. 5 Special, \$1.91; No. 6 Special, \$1.81; Feed, \$1.71.

Grain and Grade	April 3	April 10	April 17	April 24
Oats—				
No. 2 C.W.....	0 97 —1 01½	0 96½ —0 98	0 97½ —1 00½	0 99½ —1 01½
No. 3 C.W.....	0 93 —0 97½	0 92½ —0 95	0 94½ —0 97½	0 96½ —0 98½
No. 1 feed ex.....	0 93 —0 97½	0 92½ —0 95	0 94½ —0 97½	0 96½ —0 98½
No. 1 feed.....	0 92 —0 96½	0 92½ —0 94½	0 93½ —0 96½	0 95½ —0 96½
No. 2 feed.....	0 91 —0 95½	0 90½ —0 93	0 92½ —0 95½	0 94½ —0 95½
Barley—				
No. 3 C.W.....	1 64 —1 71½	1 65½ —1 73½	1 69½ —1 75½	1 70½ —1 75
No. 4 C.W.....	1 43½ —1 51	1 47 —1 50½	1 50½ —1 56½	1 50½ —1 55½
Rejected.....	1 32 —1 39½	1 33½ —1 36½	1 37½ —1 42	1 37½ —1 42
Feed.....	1 32 —1 39½	1 33½ —1 36½	1 37½ —1 40½	1 37½ —1 41½
Flax—				
No. 1 N. W.C.....	5 12½ —5 26	5 19 —5 36	5 39 —5 70½	5 37 —5 66
No. 2 C.W.....	5 05½ —5 19	5 09 —5 23	5 29 —5 65½	5 30 —5 56
No. 3 C.W.....	4 45½ —4 59	4 74 —4 88	4 94 —5 30½	4 70 —5 26

II. Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1920.

(From the Monthly Crop Report of the United States Department of Agriculture.)

Grade and Market.	January.		February.		March.		April.	
Wheat, Red Winter, No. 2—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
St. Louis.....	2 60	—2 84	2 40	—2 77	2 50	—2 68	2 64	—2 93
Chicago.....	2 50	—2 71	2 38	—2 66	2 55	—	2 63	—2 87
New York (f.o.b. affloat).....	2 65	—	2 60	—	2 60	—2 85	2 86	—3 16
Corn, No. 2, mixed—								
St. Louis.....	1 50	—1 56	1 44	—	1 58	—1 66	1 71	—1 78
Corn, No. 2—								
Chicago.....	1 42	—1 58½	1 33	—1 56	1 50	—1 69	1 66½	—1 80
Oats, No. 2—								
St. Louis.....	0 84½	—0 92	0 82	—0 91½	0 91	—1 00½	1 01	—1 09
Chicago.....	0 84½	—0 91½	0 80	—0 82	0 88	—1 00	0 92½	—1 1½
Rye, No. 2—								
Chicago.....	1 66	—1 85½	1 44	—1 68½	1 59½	—1 83½	1 82½	—2 17

III. Prices of Imported Grain and Flour at British Markets, 1920.

Mark Lane	April 5-26.		Liverpool.		April 7-27.	
Wheat—	\$ c.	\$ c.	Wheat—	\$ c.	\$ c.	
¹Canadian No. 1.....	2 79½	—	Nor. Man. No. 1.....	3 00	—	
¹Canadian No. 2.....	2 76½	—	Nor. Man. No. 2.....	2 96½	—	
American spring.....	2 75½	—	Nor. Man. No. 3.....	2 93½	—	
American hard winter.....	2 76½	—	Red winter No. 2.....	2 93½	—	
American red winter.....	2 73½	—	Hard winter No. 2.....	2 96½	—	
Australian.....	2 82½	—	Australian.....	3 03	—	
Argentine.....	2 76½	—				
Oats—						
²Canadian.....	1 39½	—1 44½				
²American.....	1 34½	—1 39½				
²Argentine.....	1 31½	—1 37				
Flour—						
Canadian spring.....	15 57	—15 94				
American spring.....	15 57	—15 94				
American winter.....	15 57	—15 94				
Australian.....	15 57	—15 94				

¹Wheat—April 5, Canadian No. 1, \$2.76½; Canadian No. 2, \$2.73½.

²Oats—April 12, Canadian \$1.37—\$1.42½; American \$1.31½—\$1.37; Argentine 1.29½—1.34½.

IV. Average Price of British-grown Grain, 1920.

(From the "London Gazette" as published pursuant to s. 8 of the Corn Returns Act, 1882.)

Week ended.	Wheat.		Barley.		Oats.	
	per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
April 3.....	72 7	2 208	90 4	2 638	55 7	1 691
April 10.....	72 9	2 212	89 10	2 623	55 2	1 687
April 17.....	72 8	2 210	87 3	2 548	55 5	1 678
April 24.....	72 8	2 210	85 0	2 482	56 5	1 716
Average.....	72 8	2 210	88 1	2 573	55 8	1 693

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OF

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G.C.M.G., M.P., Minister of Trade and Commerce.



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Printer to the King's Most Excellent Majesty

1920

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DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. EDITOR: ERNEST H. GODFREY, F.S.S.
DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

FIELD CROPS OF CANADA.

Report for the month ended May 31, 1920.

The Dominion Bureau of Statistics issued to-day the first or preliminary estimate of the areas sown this spring to grain, hay and potatoes, together with a report of their condition on May 31, as compiled from the returns of crop correspondents. The very cold and backward April prevented almost any seeding during that month in the Prairie Provinces; but the excellent weather which came in with May enabled the seeding to be done quickly, and with a splendid seed bed the condition of the grain at the end of the month was not far behind the average.

AREAS SOWN TO GRAIN, HAY AND POTATOES.

The total area estimated to be sown to wheat in Canada for 1920 is 16,921,000 acres, as compared with 19,126,000 acres, the final estimate of 1919. The decrease this year is 2,205,000 acres, or 12 p.c. The area to be harvested of fall wheat is 740,300 acres; so that the area under spring wheat is 16,180,700 acres, as compared with 18,453,175 acres in 1919. Of oats the total area sown is estimated at 15,291,000 acres, as compared with 14,952,000 acres last year, an increase of 339,000 acres, or 2 p.c. Barley has an acreage of 2,574,900 in 1920, as compared with 2,645,509, rye 730,100, as against 753,081, peas 219,065, as against 230,351, mixed grains 900,800, as against 901,612, hay and clover 10,492,900, as against 10,595,383 and alfalfa 220,800, as against 226,869. These crops all show a decrease, barley, rye and alfalfa of 3 p.c., peas of 5 p.c., and hay and clover of 1 p.c. Mixed grains are practically equal to last year. The end of May is rather too soon for definite reports on the areas planted to potatoes; but a preliminary estimate of areas planted or to be planted is 802,500 acres, as against 818,767 acres last year, a decrease of 16,267 acres, or 2 p.c.

GRAIN ACREAGE OF PRAIRIE PROVINCES.

The area sown to wheat in the three Prairie Provinces totals 15,502,700 acres, as compared with 17,750,167 acres, a decrease of 13 p.c. Oats extend to 9,613,700 acres, or 2 p.c. above last year's area of 9,452,386 acres. Barley has an area of 1,751,500 acres, as against 1,800,745 acres, a decrease of 3 p.c., and rye 562,100 acres, as against 573,218 acres, a decrease of 2 p.c. By provinces the areas in 1920 are Wheat: Manitoba 2,563,500 acres (2,880,301); Saskatchewan 9,422,800 acres (10,587,363); Alberta 3,516,400 acres (4,282,503). Oats: Manitoba 1,884,200 acres (1,847,267); Saskatchewan

4,934,500 acres (4,837,747); Alberta 2,795,000 acres (2,767,372) Barley: Manitoba 876,100 acres (893,947); Saskatchewan 477,800 acres (492,586); Alberta 397,600 acres (414,212). Rye: Manitoba 272,000 acres (298,932); Saskatchewan 203,800 acres (190,482); Alberta: 86,300 acres (83,804). The figures within brackets represent the areas of 1919.

CONDITION OF CROPS ON MAY 31, 1920.

Expressed numerically in percentage of the average yield of the past ten years, the average condition for all Canada on May 31 of the crops reported on was as follows, the figures within brackets representing the condition at the corresponding date last year: Fall wheat 99 (101); spring wheat 98 (98); all wheat 98 (98); oats and barley 98 (95); rye 96 (101); peas 98 (91); mixed grains 101 (92); hay and clover 95 (101); alfalfa 94 (95); pasture 94 (102). In Prince Edward Island conditions for all crops are either equal to or above the ten year average. In the other two Maritime Provinces the condition for most crops is from 3 to 5 p.c. below the average. In Quebec spring wheat is 100, oats are 103, barley and peas are 101, rye and hay and clover are 98 and mixed grains are 100. In Ontario the condition is for nearly all grain crops 1 or 2 p.c. below average, rye is 5 p.c. below average; hay, clover and pasture are 91, and alfalfa is 96, these crops showing the effects of the dry weather of May. In Manitoba spring wheat is 100, or just equal to the average; oats and barley are 1 and 2 p.c. respectively below. In Saskatchewan spring wheat and oats are 98, barley is 99. In Alberta fall wheat is 94, spring wheat is 91 and oats are 90. In British Columbia fall wheat is 88, spring wheat 95, oats 94 and barley 93, these averages being below both 1919 and 1918.

ERNEST H. GODFREY,
Editor.

Dominion Bureau of Statistics,
Ottawa, June 12, 1920.

I Preliminary Estimate of Areas sown to Grain Crops, Hay and Clover and Potatoes, 1920, as compared with 1919.

Field Crops.	1919.	p.c. of 1919.	1920.	Field Crops.	1919.	p.c. of 1919.	1920.
	acres.	p.c.	acres.		acres.	p.c.	acres.
Canada—				Prince Edward Island—			
Fall wheat....	672,793	110	740,300	Spring wheat .	35,595	102	36,300
Spring wheat .	18,453,175	88	16,180,700	Oats.....	174,937	100	174,900
All wheat....	19,125,968	88	16,921,000	Barley.....	5,636	99	5,600
Oats.....	14,952,114	102	15,291,000	Peas.....	490	99	485
Barley.....	2,645,509	97	2,574,900	Mixed grains..	18,900	104	19,700
Rye.....	753,081	97	730,100	Hay and clo-			
Peas.....	230,351	95	219,065	ver.....	237,883	100	237,900
Mixed grains..	901,612	100	900,800	Potatoes.....	36,234	107	38,800
Hay and clo-				Nova Scotia—			
ver.....	10,595,383	99	10,492,900	Spring wheat .	28,931	95	27,500
Alfalfa.....	226,869	97	220,800	Oats.....	158,838	104	165,200
Potatoes.....	818,767	98	802,500				

I Preliminary Estimate of Areas sown to Grain Crops, Hay and Clover and Potatoes, 1920, as compared with 1919—con.

Field Crops.	1919.	p.c. of 1919.	1920.	Field Crops.	1919.	p.c. of 1919.	1920.
	acres.	p.c.	acres.		acres.	p.c.	acres.
Nova Scotia—				Manitoba—con.			
con.				Barley.....	893,947	98	876,100
Barley.....	13,894	97	13,500	Rye.....	298,932	91	272,000
Rye.....	1,046	100	1,000	Peas.....	5,666	91	5,200
Peas.....	1,896	99	1,880	Mixed grains..	30,355	96	29,100
Mixed grains..	8,628	100	8,600	Hay and clo-			
Hay and clo-				ver.....	260,378	97	252,600
ver.....	678,357	99	671,600	Alfalfa.....	5,181	89	4,600
Potatoes.....	62,060	99	61,400	Potatoes.....	42,000	95	39,900
New Bruns-				Saskatchewan—			
wick—				Spring wheat..	10,587,363	89	9,422,800
Spring wheat..	35,641	85	30,300	Oats.....	4,837,747	102	4,934,500
Oats.....	305,484	101	308,500	Barley.....	492,586	97	477,800
Barley.....	10,662	92	9,800	Rye.....	190,482	107	203,800
Rye.....	353	80	300	Peas.....	4,853	95	4,600
Peas.....	4,697	92	4,300	Mixed grains..	22,017	98	21,600
Mixed grains..	5,297	98	5,200	Hay and clo-			
Hay and clo-				ver.....	265,417	93	246,800
ver.....	786,175	99	778,300	Alfalfa.....	11,526	100	11,500
Potatoes.....	75,573	101	76,300	Potatoes.....	66,176	96	63,500
Quebec—				Alberta—			
Spring wheat..	251,089	98	246,000	Fall wheat....	40,600	94	38,000
Oats.....	2,141,107	104	2,226,800	Spring wheat..	4,241,903	82	3,478,400
Barley.....	234,892	99	232,500	All wheat....	4,282,503	82	3,516,400
Rye.....	33,481	98	32,800	Oats.....	2,767,372	101	2,795,000
Peas.....	81,642	97	79,200	Barley.....	414,212	96	397,600
Mixed grains..	157,637	101	159,200	Rye.....	83,804	103	86,300
Hay and clo-				Peas.....	1,603	100	1,600
ver.....	4,299,360	101	4,342,400	Mixed grains..	26,000	91	23,700
Alfalfa.....	28,488	98	27,900	Hay and clo-			
Potatoes.....	315,990	100	315,600	ver.....	433,296	99	429,000
Ontario—				Alfalfa.....	21,553	108	23,300
Fall wheat....	619,494	111	688,300	Potatoes.....	45,848	91	41,700
Spring wheat..	361,150	95	343,100	British Colum-			
All wheat....	980,644	105	1,031,400	bia—			
Oats.....	2,674,341	103	2,754,600	Fall wheat....	12,699	110	14,000
Barley.....	569,183	97	552,100	Spring wheat..	31,202	105	32,800
Rye.....	140,072	94	128,900	All wheat....	43,901	107	46,800
Peas.....	127,253	94	119,600	Oats.....	45,021	105	47,300
Mixed grains..	628,761	100	628,800	Barley.....	10,497	94	9,900
Hay and clo-				Rye.....	4,911	101	5,000
ver.....	3,508,266	97	3,403,000	Peas.....	2,251	98	2,200
Alfalfa.....	146,790	95	139,500	Mixed grains..	4,017	122	4,900
Potatoes.....	157,286	94	147,800	Hay and clo-			
Manitoba—				ver.....	126,251	104	131,300
Spring wheat..	2,880,301	89	2,563,500	Alfalfa.....	13,331	105	14,000
Oats.....	1,847,267	102	1,884,200	Potatoes.....	18,000	97	17,500

II Preliminary Estimate of Areas sown to Wheat, Oats, Barley, and Rye in the Prairie Provinces, 1920, as compared with 1919.

Provinces.	1919.	p.c. of 1919.	1920.	Provinces.	1919.	p.c. of 1919.	1920.
	acres.	p.c.	acres.		acres.	p.c.	acres.
Prairie Provinces—				Saskatchewan—			
Wheat.....	17,750,167	87	15,502,700	Wheat.....	10,587,363	89	9,422,800
Oats.....	9,452,386	102	9,613,700	Oats.....	4,837,747	102	4,934,500
Barley.....	1,800,745	97	1,751,500	Barley.....	492,586	97	477,800
Rye.....	573,218	98	562,100	Rye.....	190,482	107	203,800
Manitoba—				Alberta—			
Wheat.....	2,880,301	89	2,563,500	Wheat.....	4,282,503	82	3,516,400
Oats.....	1,847,267	102	1,884,200	Oats.....	2,767,372	101	2,795,000
Barley.....	893,947	98	876,100	Barley.....	414,212	96	397,600
Rye.....	298,932	91	272,000	Rye.....	83,804	103	86,300

III Condition of Field Crops, May 31, 1917-20.

NOTE.—100=average yield per acre 1910-19.

Field Crops.	1917.	1918.	1919.	1920.	Field Crops.	1917.	1918.	1919.	1920.
	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.
Canada—					New Brunswick				
Fall wheat....	86	75	101	99	—con.	—	95	—	—
Spring wheat....	94	96	98	98	Alfalfa.....	—	—	—	—
All wheat.....	92	96	98	98	Pasture.....	84	106	99	87
Oats.....	91	100	95	98	Quebec—				
Barley.....	95	98	95	98	Spring wheat...	97	107	96	100
Rye.....	97	94	101	96	Oats.....	93	105	94	103
Peas.....	98	101	91	98	Barley.....	96	104	96	101
Mixed grains....	98	102	92	101	Rye.....	109	103	96	98
Hay and clover	88	99	101	95	Peas.....	97	104	94	101
Alfalfa.....	90	97	95	94	Mixed grains....	97	104	95	100
Pasture.....	92	100	102	94	Hay and clover	88	104	103	98
P. E. Island—					Alfalfa.....	102	95	101	97
Spring wheat...	87	103	102	100	Pasture.....	85	104	101	96
Oats.....	100	103	97	100	Ontario—				
Barley.....	98	103	99	100	Fall wheat....	82	74	102	99
Peas.....	99	105	100	101	Spring wheat...	89	104	92	98
Mixed grains....	100	105	101	102	All wheat....	91	84	96	98
Hay and clover	90	107	105	104	Oats.....	96	105	88	99
Alfalfa.....	97	90	—	—	Barley.....	99	104	88	98
Pasture.....	91	104	103	101	Rye.....	91	87	95	95
Nova Scotia—					Peas.....	100	100	88	99
Spring wheat...	102	102	97	97	Mixed grains....	100	102	90	101
Oats.....	101	101	99	96	Hay and clover	80	100	99	91
Barley.....	108	99	96	96	Alfalfa.....	95	103	95	96
Rye.....	71	101	100	83	Pasture.....	80	101	101	91
Peas.....	105	101	104	95	Manitoba—				
Mixed grains....	91	101	86	98	Spring wheat...	93	92	105	100
Hay and clover	90	80	106	99	Oats.....	98	99	101	99
Pasture.....	84	98	110	96	Barley.....	87	99	101	98
New Brunswick					Rye.....	98	91	104	97
Spring wheat...	86	105	100	95	Peas.....	—	—	—	98
Oats.....	72	105	100	97	Mixed grains....	90	96	100	102
Barley.....	75	100	98	97	Hay and clover	85	86	103	99
Peas.....	98	104	101	95	Alfalfa.....	77	84	98	96
Mixed grains....	77	106	101	95	Pasture.....	79	85	107	101
Hay and clover	85	107	102	92					

III Condition of Field Crops, May 31, 1917-20—con.

Field Crops.	1917.	1918.	1919.	1920.	Field Crops.	1917.	1918.	1919.	1920.
	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.
Saskatchewan—					Alberta—con.				
Spring wheat...	83	97	96	98	Mixed grains....	97	106	92	107
Oats.....	87	100	97	98	Hay and clover	100	90	93	96
Barley.....	92	97	97	99	Alfalfa.....	100	93	91	88
Rye.....	112	97	98	95	Pasture.....	100	88	95	97
Peas.....	72	95	100	98	British Colum-				
Mixed grains....	97	97	97	98	bia—				
Hay and clover	99	95	93	98	Fall wheat.....	78	96	97	88
Alfalfa.....	90	76	95	97	Spring wheat...	100	99	97	95
Pasture.....	97	95	102	98	All wheat.....	94	98	97	93
Alberta—					Oats.....	72	98	97	94
Fall wheat.....	107	79	89	94	Barley.....	99	98	97	93
Spring wheat...	98	95	97	91	Rye.....	95	95	102	97
All wheat.....	102	95	95	92	Peas.....	99	96	99	100
Oats.....	96	94	96	90	Mixed grains....	100	95	102	100
Barley.....	94	93	92	92	Hay and clover	99	97	101	90
Rye.....	93	99	99	94	Alfalfa.....	97	96	97	89
Peas.....	88	95	70	—	Pasture.....	97	93	100	91

CROP REPORTS FROM THE PROVINCES.

Summarized from Reports of Crop Correspondents, May 31, 1920.

Maritime Provinces.—Seeding was late everywhere, very little being done till well on into May, May has been exceptionally dry, being good weather for planting, but poor for growth. Hay and pasture lands are suffering from lack of moisture, and grains and vegetables are not generally showing above ground. Fruit trees generally are not far enough advanced to judge of the outlook, but where in bloom, promise well. Two or three reports mention that the tent caterpillar has appeared and is stripping trees of leaves and buds. One correspondent states that mice have done some damage to orchards in his vicinity. Strawberry blossoms were plentiful.

Quebec.—April was wet and cold, and there was some snow; but from about May 15 the weather became warm and dry, and seeding, although a little late, was completed under most favourable conditions. The grain is now above ground in most places, and its appearance promises an excellent crop; but rain is needed in many parts for a satisfactory growth. Although a few apple trees are reported as winter killed and plum trees have suffered slightly from hoar frost, fruit promises to be more abundant than last year. Almost everywhere the fruit trees blossomed well, and bees for pollenization were numerous. Small fruits and vegetables are also in very good condition, but abundant rain would do these much good. Potatoes were planted late in some districts, owing to the scarcity of good seed. New pastures were injured by the winter frosts, and on account of the dry weather, especially in the eastern and southern parts of the province, the crop of hay and clover is not expected to be as good as that of last

year. During the last days of the month, rainfalls have done much good, and on the whole excellent crops are expected.

Ontario.—Frosts and cold weather in April have caused considerable damage to clovers, timothy and alfalfa. This followed by the driest May in many years has caused meadows and pastures to be in poor shape, with every chance of a short hay crop unless warm rains come immediately. Fall wheat wintered very well, but is making but slow growth, as are all other grains, which are said to be as much as two weeks later than usual. Bloom on trees and bushes is heavy with the fruit setting well, and there is every indication of a bountiful yield. Spraying is sometimes neglected, owing to farmers being shorthanded. Vegetables are late in showing above ground.

Manitoba.—Throughout the province seeding was late, but weather conditions being improved, all crops are coming along nicely. High winds have prevailed almost everywhere, resulting in drifting of the soil and some damage to the wheat. There appears to be sufficient moisture, and heavy rains around the 24th and 29th of the month have proved very beneficial. There promises to be a good yield of wheat, but increased cost of production may have resulted in reduced acreage. Owing to the late cold spring, it is rather early to report on vegetables, but gardens in general seem to be in good condition. Prospects are bright for small fruits. Fruit trees are in full bloom and promise well for abundant yields. In many parts of the province grasshoppers are multiplying rapidly.

Saskatchewan.—Though spring was backward, weather conditions were most favourable in May when seeding and planting began in good earnest. There seems to have been a marked absence of frost in the month, but high winds prevailed generally, destroying some wheat, especially on light sandy soils. There is plenty of moisture, and, with continuous warm weather and showers, prospects are very favourable for all crops.

Alberta.—Spring was unusually backward, and seeding in consequence was delayed until late in May, with a considerable quantity of oats yet to be sown. Wheat is looking well where not damaged by high winds, which have prevailed to a great extent in May. In southern Alberta cutworms have caused considerable damage to crops. Warm weather is needed, but on the whole growing conditions are favourable; the crops are promising and the growth is rapid. Garden produce is just being planted, owing to the late spring weather, and the growth is slow; it is therefore too early to report on conditions.

British Columbia.—A late spring and cold wet weather delayed sowing and planting. Cold winds and frosty nights have retarded growth of all grain crops. There is a good supply of moisture, and with warm weather a good season is anticipated. Orchard and garden produce has also suffered from frost, and is very backward; some blossom is damaged, but provided there are no killing frosts, the bloom promises a good yield.

DESTRUCTION BY CUTWORMS.

Our crop correspondent, Mr. R. W. Allen of Piapot, Saskatchewan, having complained of the ravages of cutworms in his district, his letter was referred to the Entomological Branch of the Department of Agriculture. In reply the following report has been received from Mr. Arthur Gibson, Acting Dominion Entomologist and Chief of the Division of Field Crop and Garden Insects: "Cutworms have been exceptionally numerous throughout Canada. In the Prairie Provinces grain crops in some districts have been seriously injured. In the eastern provinces most of the complaints received referred to losses to such crops as beets, carrots, onions and other garden truck. The surface feeding cutworms such as the Red-backed, Striped, Dingy, etc., may be readily controlled by scattering the well known and now widely used poisoned bait, which is made as follows:

Bran or shorts.....	20 lb.
Molasses.....	1 quart.
Paris green or white arsenic.....	$\frac{1}{2}$ lb.
Water.....	2 or $2\frac{1}{2}$ gallons.

Mix the bran (or shorts) and Paris green (or White Arsenic) thoroughly in a wash tub, while dry. Dissolve the molasses in the water and wet the bran and poison with the same, stirring well so as to dampen the bran thoroughly."

CROP REPORTS FROM PROVINCIAL GOVERNMENTS.

Quebec.—The Quebec Bureau of Statistics reported (June 22) that seeding, though late in some districts, was generally accomplished under excellent conditions. There is a general shortage of labour, men being withdrawn from the farms to work in saw mills, pulp mills and urban factories.

Ontario.—The Department of Agriculture reports as follows: June 1. Some fall wheat is being ploughed up or drilled in with other spring grain, but as a rule the fields are well up to the average. June 8. Rains on Saturday brought a measure of relief to the needy crops; but while in the eastern part of the province the rainfall was fairly heavy, in some of the western and southwestern counties it was comparatively light, but sufficient in most cases to give the late sown fields a real start and help pastures. More showers were promising as returns were coming in. June 15. Local showers during the past week or ten days have helped the hay and grain fields and the newly sown root crops, but in many quarters the rainfall was inadequate for best conditions. It now looks as if hay will be a very light crop, both clover (which is now in blossom) and timothy being thin on the ground and short in height. There has been an unusually good setting of fruit in orchards. Fall wheat in some counties is heading unusually low, which will mean a lot of short straw for this crop. Huron, however, reports the fields as looking in splendid

shape. Spring grains have grown very slowly owing to the dry weather of May, and in some instances there has been injury from the wireworm. Essex complains that Hessian fly has been doing harm to the spring wheat. The spring crops generally look better in eastern Ontario than in the western counties.

Manitoba.—The Department of Agriculture reported (June 2) that work delayed by the tardy spring had not yet been overtaken, and that a portion of the barley seeding had hung over into the first week of June. Average condition of the soil was excellent. A telegram on June 14 stated that the crops never looked better, there having been splendid rains during the past four weeks.

Saskatchewan.—Telegrams from the Department of Agriculture report as follows: June 1. Damage by high winds much smaller than expected. Very little re-seeding necessary; plenty of moisture for good growth. All wheat seeded and about half oats. No reports of damage by grasshoppers yet. June 7. Seeding practically completed; good rains have repaired damage caused by high winds. Crop prospects excellent in southeastern part of province. Grasshoppers are hatching in large numbers, but no damage yet reported. June 14. Condition of crops much above average; plenty of moisture and all crops making wonderful growth. Grasshoppers reappearing in southeastern districts, but municipalities and farmers fully alive to danger, and, with Government, making every effort to control outbreak.

Alberta.—The Department of Agriculture reported (June 1) that the crop situation over the past fortnightly period was marked by two outstanding features: favourable moisture conditions throughout the province and rapid progress towards the completion of seeding. Light showers have kept the under supply of moisture moving up to the roots of the crop, but not heavy enough to check seeding. Grass on the prairie is the best in years. A telegram of June 16 reported as follows: "Southern Alberta crop looking well but rains rather local; more moisture necessary to keep up rate of growth. Soil blowing is working injury on light soils in area between Crowsnest and Bow river; some reseeded necessary. Slight injury from cutworms at points. No injury from grasshoppers yet. Central Alberta seeding completed except green feed. Growth remarkable. Conditions as to moisture ideal. Peace river operations somewhat slow. Live stock improving very rapidly. Hay promises better than a month ago."

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The temperatures recorded during May range higher than usual, which may be attributed to the really warm spell which has prevailed from the 16th to the 31st. There has been very little rainfall, however, and the month is closing hot and dry, with vegetation making rather slow growth. The highest temperature

recorded is 86, the lowest 33.6 and the mean is 56.43; while, a year ago, the maximum was 84, the minimum 32, and the mean temperature 55.31. The precipitation totals only 0.33 of an inch, compared with 3.77 inches in 1919, and with an average of 2.97 inches from 1911 to 1919. The bright sunshine, which aggregates much more than usual, averages 9.27 hours a day, as against 6.78 hours for the corresponding period of 1919. In the Ottawa district, the weather during May has been exceptionally favourable for seeding; but, at the close of the month, the indications are that vegetation will suffer unless rain is forthcoming at an early date. At the Central Farm, the sowing of grain was completed during the first ten days of May, and, by the 31st, all of the hoed crops have been got in.

About the beginning of the month Indian corn and turnips were planted on some five acres of a seventeen-acre area of land, located close to the Experimental Farm, near Hartwell's Locks, on the Rideau Canal, which property has been leased in order to carry on experiments in crop production under irrigation.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—"May has been one of the finest seeding months experienced for many years. There has been only one soaking rain, which occurred on the night of the 9th. The bright sunshine totals 312.4 hours, which is nearly one hundred hours over the average for May. There have been only two days without sunshine. Very light frosts occurred on the 3rd 4th and 5th and a hoar frost on the 15th. There were light showers on the 12th and the 16th, and, from the latter date to the close of the month there has been no precipitation, the total rainfall being a shade less than one inch. Seeding started at this Station on the 8th, and at the close of the month all of the cereals have been sown and most of the potatoes and roots have been planted, and the land has been worked ready for corn and beans. The trees appeared green on the 23rd, which is several days earlier than the average. Owing to the exceptionally good seeding weather, the crops have gone in in much better shape than for many years. There was sufficient moisture in the ground, so that the various crops have germinated quickly and made extraordinary growth."

Kentville, N.S.—W. S. Blair, Superintendent, reports:—"The mean temperature during May is 48.7, as compared with an average of 48.96 for the previous six years. The month has been unusually dry, rain falling on only four days, the total precipitation being 1.70 inch, of which 1.63 inch came on the 9th and 10th, while the average from 1914 to 1919 was 2.04 inches. The long spell of dry weather has been favourable for putting in crops, and even the wettest areas could be cropped satisfactorily after May 20. On the dry areas, clovers and grasses, at the end of the month, are showing the effects of the drought. The sunshine aggregates 251.6 hours, as against an average of 177.2 hours for the corresponding periods of the six previous years. Because of the fine weather which has prevailed, larger areas have been put under crop during May than is usually possible, and, at the Station, all planting and seeding is finished at the close of the

month. The fruit bloom is fairly well advanced at the end of May, and the trees should be in full bloom by about June 5. The amount of bloom is up to the average, and, with fine weather, the set of fruit should also be well up to the average. Conditions have not been conducive to scab development."

Nappan, N.S.—W. W. Baird, Superintendent, reports:—"On the whole, the weather during May has been fine and dry without being very warm, the only precipitation being some light snow flurries on the 2nd and 1.72 inch of rain on the 9th, while a year ago the precipitation totalled 2.73 inches. The mean temperature is 48.03, as against 48.40 last year; while the sunshine aggregates 249.3 hours, compared with 249.7 hours for May, 1919. Heavy clay land has been rather slow in drying out, but as a rule spring operations were started earlier than usual, and, as the weather has been ideal for outside work, seeding operations are well advanced at the end of the month. In the district probably about the average area of land is being seeded. At the Experimental Farm, 110 acres are being sowed to grain and hoed crops, which is a very considerable increase."

Fredericton, N.B.—W. W. Hubbard, Superintendent, reports:—"In so far as the Experimental Station is concerned, May of this year, with less than one quarter of an inch of rainfall, is likely to pass into history as one of the very driest; at the University observatory, only two miles away, the precipitation recorded totals 1.44 inch as against 5.28 inches registered there last year and a 48-year average of 3.31 inches. Frost was recorded during the nights of the 2nd, 3rd, 4th, 5th and 6th and also on the night of the 24th; but most of the second half of the month has been fairly warm. The continuously fine weather which has prevailed has greatly expedited seeding and planting, and soil conditions have been good. Wild cherry bloom was general on the 20th; but apple trees did not show any till the 26th, and blossoms had not fully opened on most varieties until the 31st. Conditions have been favourable for fertilization. Reports indicate that, on account of scarcity and high price of seed and fertilizers, there is a decided shortage in the area of grain and potatoes being seeded this year in New Brunswick. Live stock has gone to pasture during the last week in May on rather a scanty growth of grass."

Ste. Anne de la Pocatière, Que.—Jos. Begin, Superintendent, reports:—"May opened wet and cool, becoming dry and warmer after the 10th. The highest temperature recorded is 79.8, the lowest 32.2, and the mean 49.5; while a year ago the highest temperature was 78.2, the lowest 30.4 and the mean 46.1. The precipitation, 1.16 inch, was all recorded before the 10th; while for the corresponding period of last year it totalled 3.76 inches, distributed over twelve days. The bright sunshine averages 8.39 hours a day, as against 7.56 hours a day for this time in 1919. The first warm spell, which was experienced about the middle of the month, seemed to give a good start to the meadows; but the drought and high winds of the last three weeks have checked growth. Seeding became general about

the 17th, and the month closes with probably 80 p.c. of the grain sown. The ground only warmed up during the last days of May, and potato planting was delayed in this section. On the whole, crop prospects are better than they were last year at this date."

Cap Rouge, Que.—G. A. Langelier, Superintendent, reports:—"May has been warmer, drier, and brighter than the average of the corresponding period of the last eight years, the figures being, respectively, 52.98 and 50.39 for mean temperature, 2.03 and 4.11 inches for precipitation, and 246.9 and 194.3 hours for sunshine. The weather, at the beginning of the month, was cold and wet, but later on it turned exceptionally fine, and seeding operations are more advanced than usual in the district at the beginning of June. At the Station, at the date of writing (June 5), everything is in the ground grain, potatoes, corn, swedes,—with the exception of about 25 p.c. of the latter."

Lennoxville, Que.—J. A. McClary, Superintendent, reports:—"The weather during the first part of May was rather cool, and seeding was delayed on account of the ground not being in proper condition; but the latter part of the month has been finer and warmer, enabling farmers to get their seeding practically finished, but the scarcity of help has made it difficult for them to sow as large an acreage as the average of previous years. The highest temperature recorded is 83, the lowest 21 and the mean is 49.25; while a year ago the maximum was 77, the minimum 25 and the mean temperature 51.75. The precipitation totals only 1.28 inch, compared with 2.99 inches in 1919 and 2.32 inches in the corresponding period of 1918. The bright sunshine aggregates 241.9 hours, against 213.8 hours last year. It is feared that unless rain is experienced soon the hay crop in this section will be lighter than for some years. In the district, fruit trees have suffered considerable damage from the cold weather of the past winter."

Brandon, Man.—W. C. McKillican, Superintendent, reports:—"The weather during May has been unusually cool, with frequent high winds. Conditions, although not conducive to the growth of vegetation, have been very favourable for farm work, and seeding, though late in starting, has gone ahead very rapidly. At the Experimental Farm, the sowing of wheat commenced on the 3rd; of oats on May 17, and of barley on the 19th, and, at the end of the month, corn is the only crop remaining to be got in. The ground has been rather cold, but otherwise it has been in excellent condition for seeding. There is an abundance of moisture in the soil, and germination has been excellent. In the district, wheat seeding began on April 26 and was general about May 8."

Indian Head, Sask.—N.D. Mackenzie, Superintendent, reports:—"May has been characterized by extremely high winds, which have prevailed most of the time. Although little grain has been entirely blown out, large areas have been more or less damaged. Seeding, which was general by the 5th, progressed steadily, and the bulk of the wheat had been sown by the 22nd, and most of the coarse grains

by the end of the month. A splendid rain on the 25th and 26th neutralized most of the damage from wind, and crop prospects generally are excellent. At the Experimental Farm all the grain, with the exception of oats for green feed, has been sown, while potatoes, corn, roots and sunflowers have been planted."

Rosthern, Sask.—Wm. A. Munro, Superintendent, reports: "Spring was slow in opening, and work on the land did not begin till May 3, and this has delayed the seeding of all crops to a later date than usual. Rains have been sufficiently frequent and heavy to ensure satisfactory growth to the end of the month and, despite the lateness of the season, prospects are for a larger crop than has been had for four years. This year more land than usual is being sown on stubble, without previous cultivation, owing to the poor condition of horses as a result of the lack of feed during the winter."

Scott, Sask.—M. J. Tinline, Superintendent, reports:—"The weather during May has been unusually windy and cool. While the mean temperature of 45.23 is below the average, there have only been four nights during which the thermometer has registered below the freezing point, and, consequently, there has been no damage from spring frosts. The precipitation totals only 0.55 of an inch, which is considerably less than normal. While there is ample moisture in the land for the good germination of all seed, there is no reserve supply on the sub-surface soil. Neither at the station, nor in the immediate vicinity has there been soil drifting, but in districts having light soils serious damage to crops has resulted from this cause. At the end of the month seeding is almost completed, and early sown grain is from four to five inches high."

Lacombe, Alberta.—B. C. Milne, Assistant to the Superintendent, reports:—"Seeding in this district was not general until the week commencing May 9. The weather has been cool and showery, and growth has not been rapid. At the end of the month, wheat is from three to four inches high, while oats and barley, seeded in plots at this Station, are just up. In this district all the barley and about 40 p.c. of the oats remain to be seeded. Moisture conditions are good, and growth should be rapid as soon as warm weather is experienced. Large numbers of live stock have been turned out to pasture, and animals which were in poor shape at the end of the winter are finding the cool weather and the short grass rather trying. Hay is now available in all the principal towns, but very little is being purchased, and some farmers who are short of feed are making use of pastures for horses."

Lethbridge, Alberta.—W. H. Fairfield, Superintendent, reports: "The weather most of the time during May has been favourable for general farm operations. The soil on irrigated land was over wet at the beginning of the month and it was not possible for farmers on irrigated land to begin work as early as was the case on non-irrigated land. By from the 20th to the 24th, practically all of the wheat had been sown. The total area in wheat in southern Alberta will be slightly less than last year, but doubtless the acreage devoted to coarse

grains and flax will be greater. Alfalfa fields are coming on well, but growth is two weeks later than normal. No grasshopper troubles have developed, but cutworms are doing considerable damage in some localities."

Invermere, B.C.—R. G. Newton, Acting Superintendent, reports: "The weather during May, on the whole, has been rather unfavourable for plant growth. The mean temperature, 46·8, is a very low one indeed, and over two degrees below the average for May. The precipitation aggregates less than usual, although rain fell on sixteen days during the month. Potatoes, mangolds and corn have been put in during the past week, while cereals are nicely above ground. Last season's seeding of clover has come through the winter well, but older seedings have suffered considerably. Alfalfa is looking excellent."

Summerland, B.C.—R. H. Helmer, Superintendent, reports: "The nights towards the end of May have been very cool. Although no frost has been registered at this Station, in several localities injury from this cause has occurred to plants which were set out. Corn is being planted for silage and grain. Hay is practically unobtainable. Live stock is only in fair condition, but ranges have improved towards the end of the month. Peaches and other stone fruits are showing good crops. Pears are setting very heavily, while apples, although patchy in places, will probably produce a crop equal to that shipped last year. Cool weather has kept the creeks from reaching as high a level as usual."

Agassiz, B.C.—W. H. Hicks, Superintendent, reports:—"The 9·95 inches of precipitation recorded in April has been followed by 4·56 inches during May, which is about the average of past years. Although the weather of late has been rather cool, and vegetation has not had the most favourable condition for growth, crops are looking very well. In this district live stock generally is in good condition, and there has been a good demand for dairy cattle and young pigs. The wholesale price of eggs is now 52 cents a dozen, which is a slight advance as compared with April."

Sidney, Vancouver Island, B.C.—Lionel Stevenson, Superintendent, reports:—"More rain and cool weather than usual have been experienced during May, the rainfall totalling 1·24 inch, and the mean temperature for the month being 50·16. Crops that were well established have made fair growth, but late seedings and hay crops have made slow progress. The root, corn and potato plantings have been completed and cover an area equal to the average of the past five years. The hay crop will be short, the autumn wheat about average, and spring wheat and oats above average. The set of orchard fruits has not been up to the average. Considerable damage has been done by the pear thrip. Bush fruits promise only a medium crop. Vegetable gardens have made slow growth, owing to the low temperature of the soil. The live stock of the district is in good condition. The demand for live stock products is good. Sheep shearing has been completed. Feed prices continue to advance, forcing young unfinished poultry on the market."

Meteorological Record for May, 1920.

The records of temperature, precipitation and sunshine at the Experimental Farms and Stations for the month of May are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature F.			Pre- cipita- tion in inches.	Hours of Sunshine.	
	High- est.	Low- est.	Mean.		Pos- sible.	Actual.
Ottawa, Ont.....	86.00	33.60	56.43	0.33	462	287.4
Charlottetown, P.E.I.....	76.00	28.00	47.82	0.99	465	312.4
Kentville, N.S.....	81.00	24.00	48.70	1.70	461	251.6
Nappan, N.S.....	75.00	24.00	48.03	1.72	463	249.3
Fredericton, N.B.....	83.00	28.00	53.10	0.23	464	263.8
Ste. Anne de la Pocatière, Que.....	79.80	32.20	49.50	1.16	469	260.4
Cap Rouge, Que.....	82.00	26.20	52.98	2.03	468	246.9
Lennoxville, Que.....	83.00	21.00	49.25	1.28	462	241.9
Brandon, Man.....	82.00	16.00	42.80	1.33	478	226.1
Indian Head, Sask.....	82.00	30.00	51.09	1.46	481	221.0
Rosthern, Sask.....	75.00	30.20	51.98	1.32	494	278.4
Scott, Sask.....	79.70	24.20	45.23	0.55	492	266.2
Lacombe, Alberta.....	76.00	24.30	44.92	1.61	489	217.8
Lethbridge, Alberta.....	75.00	23.00	46.99	1.66	477	255.2
Invermere, B.C.....	76.00	27.00	46.80	1.19	481	203.2
Summerland, B.C.....	77.00	33.00	53.51	0.06	478	239.3
Agassiz, B.C.....	84.00	30.00	54.64	4.56	476	162.6
Sidney, Vancouver, B.C.....	71.50	34.00	50.16	1.24	473	277.7

Ottawa, June 17, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

DATES OF SEEDING AND GERMINATION OF SPRING WHEAT, 1920.

Tables I and II on pages 139 and 140 complete the records given last month by adding the May records to those of April. In the Maritime provinces seeding did not begin until May and was not at its height until the third week of that month.

Table III which compares 1919, and 1920 shows that there was not a great difference in the two years for these provinces. In Quebec seeding was general during the first three weeks of May 1920, the season being somewhat earlier than last year. In Ontario also the seeding was general this year during the first three weeks of May, but in 1919 the largest proportion of the work was done during the last two weeks of April. In the West, seeding was not general until the last week of April and the first week of May, whereas usually, as in 1919, the work was almost completed by the end of April. In British Columbia the records received were few, but they indicated the last week of April and the first week of May as the time when most of the seeding was done. The dates of appearance above ground are of course dependent upon those of seeding; but in Saskatchewan and Alberta germination was more rapid this year than last, the average number of days from seeding to first appearance above ground being 10 days as compared with last year 12 days in Saskatchewan and 14 days in Alberta. The conditions in the Prairie Provinces in May were favourable to rapid germination.

I Dates of Seeding of Spring Wheat, 1920.

Province and District.	Earliest date when seeding is general.	Total No. of replies in April.	Number of records that seeding was general.								Total No. of replies in May.
			April 1-7	April 8-14	April 15-21	April 22-30	May 1-7	May 8-14	May 15-21	May 22-31	
Prince Edward Island.....	May 10..	-	-	-	-	-	-	2	25	4	31
Nova Scotia.....	" 1..	-	-	-	-	8	13	49	17	87	
New Brunswick.....	" 3..	-	-	-	-	8	4	14	6	32	
Quebec: North of St. Lawrence.....	April 21..	4	-	1	3	18	25	16	3	62	
" South of St. Lawrence.....	May 2..	-	-	-	-	6	17	33	4	60	
" Eastern townships.....	April 27..	2	-	-	2	10	21	23	-	54	
" Montreal counties.....	April 20..	4	-	1	3	12	17	6	-	35	
Ontario: Eastern.....	April 9..	30	-	1	7	22	26	12	2	40	
" Central.....	April 15..	58	-	-	29	29	24	4	-	28	
" Western.....	" 3..	40	1	-	22	17	33	6	1	41	
" Southern.....	March 23..	44	15	7	18	4	3	-	-	3	
" Northern.....	April 20..	4	-	-	1	3	14	7	2	23	
Manitoba: Eastern.....	April 15..	6	-	-	1	5	17	1	1	19	
" North Central.....	" 23..	5	-	-	-	5	14	6	3	24	
" South Central.....	" 19..	15	-	-	2	13	9	-	-	9	
" North Western.....	" 20..	20	-	-	1	19	22	9	5	36	
" South Western.....	" 24..	14	-	-	-	14	19	1	-	20	
Saskatchewan: North.....	" 21..	11	-	-	1	10	44	37	6	87	
" South.....	" 21..	21	-	-	1	20	21	16	2	40	
Alberta: North.....	" 29..	6	-	-	-	6	16	27	10	53	
" South.....	" 27..	4	-	-	-	4	15	7	-	22	
British Columbia.....	" 10..	8	-	1	2	5	5	2	1	8	

¹Including 7 in last week of March.

II Dates of Appearance above Ground of Spring Wheat, 1920.

Province and District.	Earliest date of appearance above ground.	Total No. of replies in April.	Number of records of appearance above ground.								Total No. of replies in May.	Average No. of days from seeding to appearance as recorded in	
			April 1-7	April 8-14	April 15-21	April 22-30	May 1-7	May 8-14	May 15-21	May 22-31		April	May
Prince Edward Island.....	May 21..	-	-	-	-	-	-	-	-	25	25	-	8
Nova Scotia.....	" 11..	-	-	-	-	-	-	-	3	37	50	-	9
New Brunswick.....	" 15..	-	-	-	-	-	-	-	-	14	23	-	10
Quebec: North of St. Lawrence.....	" 5..	-	-	-	-	-	1	10	32	17	60	-	9
" South of St. Lawrence.....	" 5..	-	-	-	-	-	-	1	3	35	54	-	8
" Eastern townships.....	" 10..	-	-	-	-	-	-	6	21	20	47	-	8
" Montreal counties.....	" 3..	-	-	-	-	-	1	13	20	6	40	-	9
Ontario: Eastern.....	" 1..	-	-	-	-	-	-	6	17	21	2	-	9
" Central.....	April 25..	3	-	-	-	3	25	20	12	-	57	7	12
" Western.....	" 20..	3	-	-	1	2	12	32	20	1	65	12	11
" Southern.....	" 15..	16	-	-	4	12	9	5	4	-	18	18	16
" Northern.....	May 1..	-	-	-	-	-	3	9	13	5	30	-	11
Manitoba: Eastern.....	April 25..	1	-	-	-	1	-	15	8	1	24	10	11
" North Central.....	May 4..	-	-	-	-	-	4	7	14	3	28	-	10
" South Central.....	" 1..	-	-	-	-	-	12	13	4	-	29	-	10
" North Western.....	" 2..	-	-	-	-	-	7	27	9	5	48	-	10
" South Western.....	" 1..	-	-	-	-	-	6	26	5	-	37	-	10
Saskatchewan: North.....	" 1..	-	-	-	-	-	6	25	39	10	80	-	10
" South.....	" 1..	-	-	-	-	-	13	16	20	5	54	-	10
Alberta: North.....	" 7..	-	-	-	-	-	1	4	27	14	46	-	10
" South.....	" 1..	-	-	-	-	-	2	5	17	1	25	-	10
British Columbia.....	April 25..	3	-	-	-	3	1	3	3	1	8	10	11

III. Dates of Seeding and Appearance above Ground of Spring Wheat, 1919 and 1920.

A—DATES OF SEEDING.

Items.	Pr. Ed. Is.		N.S.		N.B.		Que.		Ont.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
No. of records....	28	31	90	87	43	32	208	221	524	311
Earliest date seeding general	May 9	May 10	May 1	May 1	May 1	May 3	April 27	April 20	Mar. 10	Mar. 23
No. of records seeding general—										
April 1-7....	—	—	—	—	—	—	—	—	40 ¹	16 ²
“ 8-14....	—	—	—	—	—	—	—	—	15	8
“ 15-21....	—	—	—	—	—	—	1	2	104	77
“ 22-30....	—	—	—	—	—	—	6	8	207	75
May 1-7....	—	—	11	8	7	8	27	46	62	100
“ 8-14....	8	2	19	13	21	4	65	80	49	29
“ 15-21....	15	25	41	49	13	14	88	78	34	5
“ 22-30....	5	4	19	17	2	6	21	7	13	1

Items.	Man.		Sask.		Alberta		B.C.		Canada.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
No. of records....	213	168	164	159	84	85	17	16	1,371	1,110
Earliest date seeding general	April 15	April 15	April 1	April 21	April 1	April 27	April 1	April 10	Mar. 10	Mar. 23
No. of records seeding general—										
April 1-7....	—	—	3	—	11	—	2	—	56	16
“ 8-14....	2	—	20	—	20	—	5	1	62	9
“ 15-21....	71	4	88	2	37	—	4	2	305	87
“ 22-30....	124	56	48	30	11	10	3	5	399	184
May 1-7....	14	81	4	65	2	31	2	5	129	344
“ 8-14....	1	17	1	53	2	34	1	2	167	234
“ 15-21....	1	9	—	8	—	10	—	1	192	199
“ 22-31....	—	1	—	1	1	—	—	—	61	37

¹Including two in second week, five in third week and 14 in last week of March.²Including seven for the last week in March.

III. Dates of Seeding and Appearance above Ground of Spring Wheat, 1919 and 1920.

B—DATES OF APPEARANCE ABOVE GROUND.

Items.	Pr. Ed. Is.		N.S.		N.B.		Que.		Ont.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
No. of records....	19	25	61	50	37	23	162	201	316	238
Earliest date of appearance above ground...	May 16	May 21	May 9	May 11	May 12	May 15	May 5	May 3	April 1	April 15
No. of records of appearance above ground—										
April 1-7....	—	—	—	—	—	—	—	—	3	—
“ 8-14....	—	—	—	—	—	—	—	—	9	—
“ 15-21....	—	—	—	—	—	—	—	—	16	5
“ 22-30....	—	—	—	—	—	—	—	—	27	17
May 1-7....	—	—	—	—	—	—	1	3	62	55
“ 8-14....	—	—	3	3	3	—	11	32	94	83
“ 15-21....	5	—	23	10	17	9	62	88	65	70
“ 22-31....	14	25	35	37	17	14	88	78	40	8
Average No. of days from seeding to appearance above ground.....	9	8	10	9	10	10	9	9	11	13

III. Dates of Seeding and Appearance above Ground of Spring Wheat, 1919 and 1920—con.

B. DATES OF APPEARANCE ABOVE GROUND—con.

Items.	Man.		Sask.		Alberta		B.C.		Canada.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
No. of records....	187	167	139	134	82	71	15	11	1,018	920
Earliest date of appearance above ground—	April 26	April 25	April 21	May 1	April 10	May 1	April 14	April 25	April 1	April 1
No. of records of appearance above ground—										
April 1-7....	-	-	-	-	-	-	-	-	3	-
“ 8-14....	-	-	-	-	-	-	1	-	11	-
“ 15-21....	-	-	2	-	7	-	4	-	29	5
“ 22-30....	14	1	29	-	27	-	4	3	101	21
May 1-7....	91	29	70	19	24	3	3	1	251	110
“ 8-14....	55	88	31	41	14	9	1	3	212	259
“ 15-21....	23	40	7	59	7	44	2	3	211	323
“ 22-31....	4	9	-	15	2	15	-	1	200	202
Average No. of days from seeding to appearance above ground.....	10	10	12	10	14	10	10	11	11	10

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Ministry of Agriculture reports (June 1) that May was a favourable month for the farmer in most parts of the country, being generally dry and, in the latter half of the month, warm, though conditions were not so favourable in the north or in Wales. Sowing and planting could be proceeded with, and the large arrears at the beginning of the month have now been reduced, though work is still backward on the whole. Crops have generally done fairly well. Wheat has improved considerably and is a better colour than a month ago, though on heavy, wet land it is still not looking very well. Barley and oats are, as a rule, satisfactory plants, though some damage by wireworm is reported, and the earlier sown crops suffered somewhat during the cold weather. Though often backward, having been sown late, these crops are now generally doing well. The area under barley appears to have been increased, but oats, if anything, seem to have been sown on a rather smaller area than last year, especially in the north and in Wales. Beans are coming into bloom and promise well, whilst peas are also very satisfactory. In many districts weeds are rather prevalent in the grain crops. Potatoes are backward, and some still remain to be planted. The area intended for hay is estimated to be very slightly in excess of last year, but much better crops will be obtained, the prospective yield of seeds' hay being estimated at 2 p.c. and meadow hay at 4 p.c. above average.

India.—The latest estimate (May 6) of the Indian Department of Statistics places the area under wheat for the year 1919-20 at 29,727,000 acres, as against 23,806,000 acres, the final estimate of 1918-19. The increase is therefore 5,921,000 acres, or nearly 25 p.c. The yield was estimated (April 22) at 364,896,000 bushels, as compared with 280,485,000 bushels in 1918-19, an increase this year of 30 p.c. The

low total yield of 1918-19 was due to a great decrease in the area sown, caused by failure of the monsoon and the prevalence of influenza at sowing time.

Southern Palestine.—It is probable that the grain harvest of this district will this year be well above the average. Recent reports indicate a remarkable recovery of wheat and barley crops since February (*British Board of Trade Journal May 27, 1920*).

Australia.—The wheat crop of Australia for the season of 1919-20 is provisionally estimated by the Commonwealth Census and Statistics Office at 46,210,380 bushels from 6,570,402 acres.

France.—The French Ministry of Agriculture is sparing no effort to encourage the farmers to plant as large an acreage of wheat as possible. It is estimated that for the year 1920 11,369,000 acres have been planted, as against 16,166,000 acres in 1913. Among the reasons for the relatively low acreage in 1920 are scarcity of labour, fertilizers and seed (*U.S. Commerce Reports*).

Argentina.—The first official forecast for the season 1919-20 is, according to the Boletín Mensual de Estadística, as follows: Wheat 214,140,000 bushels; oats, 57,113,000 bushels; barley, 10,279,000 bushels; and flaxseed 42,038,000 bushels.

United States.—The Crop Reporting Board of the U. S. Department of Agriculture estimates (June 8) that the total area sown to wheat for 1920 is 53,652,000 acres, as compared with 73,243,000 acres in 1919, a decrease of 19,591,000 acres, or 26.7 p.c. For the five-year period 1913-17, the average wheat acreage was 52,320,000; so that the area sown for 1920 is only 1,332,000 acres above this figure. The area under winter wheat is 34,165,000 acres, or 31.5 p.c. less and under spring wheat 19,487,000 acres, or 16.5 p.c. less. The area sown to oats is 41,032,000 acres, or 3.2 p.c. less than last year, to barley 7,437,000 acres, or 0.2 p.c., more than last year, and to rye 5,470,000 acres, or 22.6 p.c., less than last year. The acreage under hay is 71,752,000 acres, or 0.4 p.c., less than last year. The following table gives the condition and indicated yields for 1920 with comparative figures of 1919:

Crops.	Condition in per cent of normal.				Yield per acre.			Total yield in millions of bushels.	
	June 1, 1919.	May 1, 1920.	June 1, 1920.	June 1, (10-year average.	1919 (final)	1920. ¹	1914-1918 average.	1919.	1920. ¹
	p.c.	p.c.	p.c.	p.c.	bush.	bush.	bush.	bush.	bush.
Winter wheat.....	94.9	79.1	78.2	82.0	14.7	14.8	15.9	732	504
Spring wheat.....	91.2	—	89.1	93.3	9.0	14.2	13.5	209	277
All wheat.....	93.8	—	81.7	86.1	12.8	14.5	15.1	941	781
Oats.....	93.2	—	87.8	89.9	29.4	32.1	33.8	1,248	1,315
Barley.....	91.7	—	87.6	90.6	22.3	24.9	26.3	166	185
Rye.....	93.5	85.1	84.4	89.2	12.5	14.6	15.6	89	80
					ton	ton	ton	ton	ton
Hay.....	94.1	89.4	88.9	87.9	1.51	1.56	1.42	109	112
Pasture.....	97.4	79.8	88.8	90.1	—	—	—	—	—

¹Interpreted from condition reports.

The prices on June 1, 1920, as compared with those of the same date last year, placed within brackets, are reported as follows in cents per bushel:—Wheat 258·3 (228·4), oats 102·9 (71·2), barley 148·3 (109·2), rye 183·9 (143·7); per ton, hay \$24·85 (\$23·30).

INTERNATIONAL INSTITUTE OF AGRICULTURE.

The May issue of the "International Crop Report and Agricultural Statistics" gives the following information as to crops and live stock.

Crop Conditions in the Northern Hemisphere.—In England and Wales rains were almost continuous during April. Wheat on heavy land has lost colour and is not so promising as a month ago. In central Scotland many fields of wheat have been seriously damaged by an insect believed to be the wheat bulb fly. In Italy the condition on May 1 of wheat, rye, barley and oats was average. In Poland, the condition on May 1 of the wheat crop was average and that of the rye crop was bad. Crop conditions on April 1 in Portugal were excellent for wheat and good for rye, barley and oats. In Switzerland winter cereals were fairly good plants at the beginning of April. In Czecho-Slovakia crop conditions on April 1 were as follows. Bohemia: Wheat 2·5, rye and winter barley 3; Moravia: Wheat 2·8, rye 3·2, winter barley 2·6; Silesia: Wheat 3·1, rye 4·1. (Scale 1=very good, 2=over average; 3=under average, 5=very bad). In Hungary winter wheat is reported as coming on well in the greater part of the country, and in general the same may be said of rye; but in many places the heads are small on account of very hot weather at the beginning of spring. On the whole it appears that the rye crop will be less than was at first expected. In Algeria severe drought is reported, and in Oran alone it is estimated that 371,000 acres of wheat and barley have been entirely lost. The wheat and barley crops of Egypt are well advanced and show good prospects, but the area under cereals is reported as considerably less than usual. Drought has caused some damage to crops in Morocco, particularly wheat, spoiling the excellent prospects of a month ago. Crop conditions on May 1, 1920, were average for wheat, fairly good for barley and good for oats and maize.

Wheat Crop of British India.—The yield of wheat in 1919-20 is estimated at 364,896,000 bushels against 280,485,000 bushels in 1918-19 and 352,837,000 bushels, the average for the previous five years; or 130·1 p.c. and 103·4 p.c. of the two last mentioned yields respectively.

Potatoes and Sugar Beet in Czecho-Slovakia.—The area under potatoes in Bohemia, Moravia, and Silesia in 1919 was 885,000 acres, against 955,000 acres the previous year and 1,213,000 acres in 1914, or 92·6 p.c. and 72·9 p.c. of the latter two areas respectively. The corresponding yields were 84,092,000 bushels, 85,335,000 bushels and 210,396,000 bushels, or percentages of 98·5 and 40 for the 1919 yield, compared with 1918 and 1914 respectively. The yields per bushel from the above data are 95·02 bushels in 1919, 89·37 bushels in 1918

and 173.38 bushels in 1914. The area under sugar beet in 1919 in Bohemia, Moravia and Silesia was 433,000 acres, against 455,000 acres the previous year and 558,000 acres in 1914, or 95.1 p.c. and 77.6 p.c. of the latter two areas respectively. The yield of sugar beet in 1919 amounted to 4,008,000 short tons against 5,034,000 tons in 1918 and 7,076,000 tons in 1914, or 79.6 p.c. and 56.6 p.c. of the latter two quantities respectively. The corresponding yields per acre are 9.26, 11.05 and 12.67 short tons respectively.

Winter Cereals in Northern Hemisphere.—The following statement shows the area sown to winter cereals for 1920 in countries of the northern hemisphere, with percentage comparisons with the previous year and with the average of the five year period 1914-18:

Country.	Per cent of		Per cent of average 1914-18.	Country.	Per cent of		Per cent of average 1914-18.
	1919.	1920.			1919.	1920.	
	000				000		
Wheat—	p.c.	acres.	p.c.	Rye—con.	p.c.	acres.	p.c.
Belgium.....	107.5	353	—	United States.....	79.4	5,530	141.1
Spain*.....	96.8	10,050	99.6	Belgium.....	106.9	80.0	—
France*.....	103.5	11,369	89.5	Spain.....	100.3	4,265	110.5
Scotland.....	91.0	70	102.9	France.....	135.3	346	116.7
Roumania (former Kingdom)*.....	64.3	1,891	40.1	Roumania (former Kingdom).....	—	32	25.4
Bessarabia*.....	44.9	406	32.2	Bessarabia.....	—	1.7	—
Bukovina.....	—	20	—	Switzerland.....	—	2.2	64.3
Switzerland.....	—	131	111.1	Japan.....	91.8	2,691	90.3
Canada*.....	110.0	740	91.2	Algeria {Algiers	101.5	2,679	92.5
United States*.....	68.5	34,166	96.8	Algeria {Constantine			
Guatemala.....	101.3	22	—	Oran.....			
British India*.....	124.1	29,537	92.5	Morocco.....	99.0	1,507	—
Japan*.....	97.3	1,325	106.1	Barley—			
Algeria* {Algiers	111.3	3,116	95.8	Tunis.....	116.7	1,137	103.8
Algeria* {Constantine				Oats—			
Oran.....				Belgium.....	102.9	556	—
Morocco.....	96.0	1,489	—	Spain.....	98.7	1,574	112.3
Tunis*.....	116.4	1,384	103.9	France.....	111.0	1,833	101.9
Total for 11 countries (*)..	89.5	94,054	91.6	Roumania (former Kingdom).....	—	34	—
				Bessarabia.....	—	7	—
				Switzerland.....	99.6	57	71.9
				Algeria {Algiers	102.6	547	92.2
				Algeria {Constantine			
				Oran.....			
				Morocco.....	84.0	5.7	—
				Tunis.....	116.7	148	103.8
				Flaxseed—			
				Belgium.....	97.8	47	—
				British India.....	122.9	2,323	—
				Algeria {Algiers	400.0	2.5	—
				Algeria {Oran.....			
					50.0	2.5	—

In the case of wheat, the total sown for 11 countries (Spain, France, Scotland, Roumania (Old Kingdom), Bessarabia, Canada, United States, British India, Japan, Algeria, and Tunis) amounts to 94,054,-

000 acres, which is 10.5 p.c. less than in 1919 and 8.4 p.c. less than the quinquennial average.

Statistics of Farm Live Stock.—The May Bulletin gives also records of the numbers of farm live stock in various countries as follows:

DENMARK.—On January 10, 1920, the number of swine in Denmark was reported as 917,836, as compared with 583,366 on February 10, 1919, 513,012 on February 5, 1918, and 2,496,706 on July 15, 1914.

SWITZERLAND.—Provisional returns show the number of live stock on April 24, 1919, to be as follows, the final estimates of April 19, 1918, being given in brackets: Horses 124,084 (128,971); mules 3,262 (3,092); asses 959 (1,072); cattle 1,443,170 (1,530,522); swine 465,306 (365,798); sheep 265,413 (229,649); goats 350,485 (356,455).

CZECHO-SLOVAKIA.—In Bohemia, Moravia and Silesia the number of farm animals on May 31, 1919, was as follows, the corresponding figures for 1910 being given within brackets: Horses 325,111 (463,162); cattle 2,359,431 (3,288,291); sheep 170,432 (188,863); swine 819,345 (1,790,746); goats 849,677 (649,615). In Slovakia the numbers on July 31, 1919, as compared with 1911, were: Horses 166,155 (296,256); cattle 969,461 (1,151,469); sheep 546,337 (446,026); swine 600,111 (701,513); goats 95,259 (29,033).

UNION OF SOUTH AFRICA.—The numbers of farm live stock in 1919 as compared with 1918, in brackets, are reported as follows: Horses 695,138 (677,884 mules); 81,150 (82,769); asses 498,616 (473,587); cattle 5,575,488 (5,171,654); sheep 28,491,500 (26,897,754); goats 5,842,270 (5,273,879); swine 724,007 (660,565); ostriches 282,070 (314,265). In 1919 the number of Angora goats was 2,696,670, and of other goats 3,145,600. Except for the number of ostriches in 1918, the data do not include the numbers of live stock in native locations, reserves, etc., which in 1918 were as follows: Horses 103,138; mules 1,790; asses 80,729; cattle 1,680,270; woolled sheep 2,283,282; other sheep 732,999; Angora goats 160,714; other goats 2,584,278; swine 382,659.

Agricultural Co-operation in Ireland.—The Annual Report for the year ended March 31, 1919, of the Irish Agricultural Organization Society, Ltd., shows that 950 societies with a membership of 117,484 had a total turnover of \$44,227,651, as compared with a turnover of \$36,862,265 in 1917. The figures for 1919 are the highest on record.

FIELD CROPS OF THE UNITED KINGDOM, 1919.

Vol. LIV, Part II of the Agricultural Statistics of England and Wales [Cmd. 695], dated March 12, 1920, gives the final returns of the acreage and yield of field crops in the United Kingdom (exclusive

of the Channel Islands and the Isle of Man) for the years 1918 and 1919 as follows:

Crops.	1918.	1919.	1918.	1919.	1918.	1919.	Average of the ten years 1909-1918.
	acres.	acres.	bush.	bush.	bush. per acre.	bush. per acre.	bush. per acre.
Wheat.....	2,793,049	2,370,367	93,144,000	69,320,000	33.3	29.2	31.6
Barley.....	1,838,356	1,870,087	62,080,000	57,704,000	33.8	30.9	33.4
Oats.....	5,603,421	5,117,002	249,568,000	203,960,000	44.5	39.9	42.6
Beans.....	251,222	887,600 ¹	7,450,400	7,100,800 ¹	29.7	25.3 ¹	28.1
Peas.....	128,364	441,630 ¹	3,525,360	3,533,040 ¹	27.5	26.7 ¹	24.9
Potatoes.....	1,505,176	1,218,774	344,017,900	235,437,600	227.5	194.0	220.1
Turnips & Swedes	1,600,732	1,681,349	851,745,500	850,141,600	533.4	507.8	540.9
Mangolds.....	499,938	471,759	384,973,300	289,783,700	768.4	615.5	727.4
			tons	tons.	tons per acre.	tons per acre.	tons per acre.
Hay ²	2,803,413	2,290,000 ¹	4,920,160	2,564,800 ¹	1.8	2.7 ¹	1.8
Hay ³	5,950,352	3,608,000 ¹	8,891,680	4,040,960 ¹	1.5	1.9 ¹	1.5
			cwt.	cwt.	cwt. per acre.	cwt. per acre.	cwt. per acre.
Hops.....	15,666	16,745	145,600	211,680	9.3	12.7	10.8

¹These figures represent the total for Great Britain only, as the figures for Ireland are not available. ²From clover, sainfoin, etc. ³From permanent grass.

NOTE.—The ton=2,000 lb., and the cwt.=100 lb.

The yields per acre obtained from the grain crops in the United Kingdom in 1919 were generally unsatisfactory and below the average of the preceding ten years; but some compensation for the poor average yield was found in the larger acreage. The total wheat crop in 1919 was less than that of the previous year by 24,000,000 bushels, partly owing to the decline in acreage of 400,000 acres and partly to the low yield. It was, however, in excess of the crops obtained in 1914, 1916 and 1917, and 4,000,000 bushels above the average of the last ten years. The report shows that 50 years ago, viz., in 1869, the estimated wheat acreage in the United Kingdom was 3,976,000 acres, and that in 1868 the maximum yield was obtained of 133,864,000 bushels which is more than double the yield of 1919. Notwithstanding the diminution in wheat production, the farm land of the United Kingdom supplies at the present time more than one-half of the total home requirements of wheat, barley, oats, beans and peas taken together. In the case of wheat, the home-grown production only forms about one-quarter of the total supply, but in the case of the other crops the proportion is substantially greater. During the war, 85 p.c. of the total supply of oats has been home grown, 69 p.c. of the barley, 80 p.c. of the beans, and 54 p.c. of the peas.

The natural weights per measured bushel of wheat, barley and oats in England and Wales were in 1919 as follows, with the figures

of 1918 in brackets for comparison: Wheat 61.9 lb. (62.2 lb.); barley 53.8 lb. (53.8 lb.); oats 38.4 lb. (39.3 lb.).

THE WEATHER DURING MAY.

The Dominion Meteorological Office reports that the mean temperature was below the normal in British Columbia, Alberta, most of southern Ontario, and in the greater portion of Nova Scotia, elsewhere it was average or above. The most pronounced negative departures occurred in British Columbia, amounting in some places to 5°. The positive departures were not pronounced, nowhere exceeding 3°. The precipitation was below the average in all portions of the Dominion, except over a portion of British Columbia, a few scattered places in Alberta and Saskatchewan, and on the Island of Anticosti. From Ontario to the Maritime Provinces the negative departure was very pronounced, varying from an inch to two and three-quarter inches. The total fall in many parts of Ontario was less than half-an-inch, in western Quebec less than an inch, and over large sections of the Maritime Provinces barely over an inch. At Toronto, where the rainfall has been recorded since 1840, it was the driest May recorded.

PRICES OF AGRICULTURAL PRODUCE, 1920.

Weekly Range of Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

(Cash Prices and Participation Certificates as ordered by the Canadian Wheat Board.)

Grain and Grade.	May 1.	May 8.	May 15.	May 22.	May 29.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—					
No. 1 hard.....	2 15	2 15	2 15	2 15	2 15
No. 1 Nor.....	2 15	2 15	2 15	2 15	2 15
No. 2 Nor.....	2 12	2 12	2 12	2 12	2 12
No. 3 Nor.....	2 08	2 08	2 08	2 08	2 08
No. 4 special.....	2 02	2 02	2 02	2 02	2 02
No. 5 special.....	1 91	1 91	1 91	1 91	1 91
No. 6 special.....	1 81	1 81	1 81	1 81	1 81
Feed.....	1 71	1 71	1 71	1 71	1 71
Oats—	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
No. 2 C.W.....	1 09½—1 13	1 16½—1 20½	1 17½—1 18	1 16½—1 19½	1 23—1 29
No. 3 C.W.....	1 06½—1 10	1 13½—1 17½	1 14—1 15½	1 14½—1 17¾	1 29½—1 27½
No. 1 feed ex.....	1 06½—1 10	1 13½—1 17½	1 14—1 15	1 14½—1 17¾	1 20—1 26
No. 1 feed.....	1 06½—1 09½	1 11½—1 16½	1 12—1 13½	1 13½—1 16½	1 18—1 24
No. 2 feed.....	1 05½—1 08½	1 08½—1 13½	1 09—1 10½	1 11½—1 14¾	1 15—1 21
Barley—					
No. 3 C.W.....	1 77½—1 80½	1 80½—1 82½	1 79½—1 82½	1 76½—1 82	1 80½—1 85
No. 4 C.W.....	1 60—1 62½	1 62½—1 67½	1 64½—1 67	1 59½—1 65	1 58½—1 63
Rejected.....	1 54—1 56½	1 57½—1 63½	1 60½—1 63	1 54½—1 60½	1 54½—1 59
Feed.....	1 54—1 56½	1 57½—1 63½	1 59½—1 62½	1 54½—1 60½	1 54½—1 60
Flax—					
No. 1 N.W.C.....	5 04—5 15	5 07—5 17	5 10—5 17½	4 56—5 05	4 55—4 75
No. 2 C.W.....	4 99—5 10	5 03—5 13	5 06—5 13½	4 52—5 01	4 51—4 71
No. 3 C.W.....	4 34—4 45	4 37—4 47	4 40—4 47½	3 86—4 35	3 90—4 05

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1920

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DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. CHIEF, DIVISION OF AGRICULTURAL
STATISTICS: ERNEST H. GODFREY, F.S.S. DOMINION BUREAU OF STATISTICS, OTTAWA,
CANADA.

FIELD CROPS OF CANADA.

Report for the month ended June 30, 1920.

The second or revised estimate of the areas sown to the principal grain crops and to potatoes and hay was issued to-day by the Dominion Bureau of Statistics, together with a statement of their condition on June 30, as compiled from the returns of crop correspondents. The report gives also estimates of the areas under the later sown cereals and hoed crops.

PRINCIPAL GRAIN CROPS, POTATOES AND HAY.

In most cases the areas reported, after conclusion of seeding, are larger by about 1 or 2 p.c. than the preliminary estimate of a month ago. Wheat, including fall wheat, is now reported as occupying for all Canada 17,186,300 acres, which compares with 19,125,968 acres, the final estimate of 1919, and represents a decrease of 10 p.c. Spring wheat occupies 16,446,000 acres, or 11 p.c. less than last year, and fall wheat 740,300 acres, or 10 p.c. more. The area sown to oats is 15,555,400 acres, as against 14,952,114 acres last year, an increase of 4 p.c. Barley is sown to 2,588,000 acres, or 2 p.c. less, rye 729,500 acres, or 3 p.c. less, peas 222,300 acres, or 3 p.c. less, mixed grains 909,350 acres, or 1 p.c. more, hay and clover 10,409,150 acres, or 2 p.c. less and alfalfa 229,300 acres, or 1 p.c. more. Potatoes have an acreage of 819,000, which is practically equal to that of last year.

GRAIN AREAS IN THE PRAIRIE PROVINCES.

In the three Prairie Provinces, the estimated area sown to wheat is 15,771,000 acres, as against 17,750,167 acres, the final estimate of 1919, a decrease of 10 p.c. In Manitoba the area is 2,687,000 acres, as against 2,880,301 acres (decrease 7 p.c.), in Saskatchewan 9,440,000 acres, as against 10,587,363 acres (decrease 11 p.c.) and in Alberta 3,644,000 acres, as against 4,282,503 acres (decrease 15 p.c.). Under oats the area is 9,919,000 acres, as against 9,452,386 acres, an increase of 5 p.c. The acreage in Manitoba is 1,887,000, in Saskatchewan 5,126,000 and in Alberta 2,906,000; barley is sown to 1,763,000 acres, against 1,800,745 acres, a decrease of 2 p.c., Manitoba having 865,000 acres, Saskatchewan 480,000 acres, and Alberta 418,000 acres. The total acreage under rye for the three provinces is 557,600 acres, as against 573,218 acres, a decrease of 3 p.c. The area under flax is placed at 1,178,000 acres, as against 1,068,014 acres last year, an increase of 10 p.c. By provinces the area is 62,000 acres in Manitoba, 1,032,000 acres in Saskatchewan and 84,000 acres in Alberta. The area planted in potatoes is 146,700 acres, as against 154,024 acres last

III.—Condition of Field Crops on June 30, 1920, as compared with May 31, 1920, and June 30, 1919, together with average yield per acre for the ten years 1910-19.

NOTE.—A condition of 100=average yield per acre, 1910-19.

Field Crops.	June 30, 1919.	May 31, 1920.	June 30, 1920.	Average Yields per acre 1910-19	Field Crops.	June 30, 1919.	May 31, 1920.	June 30, 1920.	Average Yields per acre 1910-19
	p.c.	p.c.	p.c.	Bush.		p.c.	p.c.	p.c.	bush.
Canada—					Ontario—con.				
Fall wheat.....	102	99	97	22.50	Oats.....	85	99	101	34.75
Spring wheat.....	90	98	100	16.50	Barley.....	84	98	98	20.50
All wheat.....	91	98	100	16.75	Rye.....	94	95	97	17.00
Oats.....	87	98	100	33.25	Peas.....	88	99	95	15.75
Barley.....	91	98	98	25.75	Mixed grains.....	88	101	99	35.50
Rye.....	97	96	98	16.00	Potatoes.....	91	-	100	114.75
Peas.....	92	98	96	15.75					tons
Mixed grains.....	91	101	99	33.25	Hay and clover.....	100	91	82	1.45
Potatoes.....	95	-	98	146.00	Alfalfa.....	99	96	97	2.40
				tons	Manitoba—				
Hay and clover.....	92	95	88	1.50					bush.
Alfalfa.....	96	94	95	2.40	Spring wheat.....	100	100	103	17.25
				bush.	Oats.....	97	99	102	34.25
Prince Edward Id.—					Barley.....	100	98	99	24.50
Spring wheat.....	101	100	100	18.75	Rye.....	102	97	98	15.50
Oats.....	100	100	98	34.75	Mixed grains.....	99	102	101	27.25
Barley.....	99	100	99	28.00	Potatoes.....	100	-	98	150.00
Peas.....	98	101	97	18.50	Peas.....	101	98	104	-
Mixed grains.....	101	102	99	41.75					tons
Potatoes.....	98	-	105	171.75	Hay and clover.....	101	99	100	1.40
				tons	Alfalfa.....	100	96	101	2.25
Hay and clover.....	103	104	95	1.55	Saskatchewan—				bush.
Fodder corn.....	-	-	-	9.55	Spring wheat.....	91	98	100	16.00
				bush.	Oats.....	82	98	100	33.25
Nova Scotia—					Barley.....	84	99	99	23.75
Spring wheat.....	98	97	96	20.00	Rye.....	90	95	99	13.25
Oats.....	100	96	95	32.50	Peas.....	99	98	96	20.00
Barley.....	97	96	97	28.25	Mixed grains.....	98	98	104	30.25
Rye.....	93	83	98	20.25	Potatoes.....	92	-	96	148.25
Peas.....	99	95	103	20.25					tons
Mixed grains.....	100	98	96	32.00	Hay and clover.....	86	98	104	1.35
Potatoes.....	98	-	100	183.00	Alfalfa.....	83	97	99	1.80
				tons	Alberta—				bush.
Hay and clover.....	108	99	89	1.70	Fall wheat.....	80	94	107	20.75
Fodder corn.....	-	-	-	8.80	Spring wheat.....	80	91	99	16.75
				bush.	All wheat.....	80	92	99	17.00
New Brunswick—					Oats.....	84	90	98	36.25
Spring wheat.....	97	95	96	18.00	Barley.....	85	92	96	25.50
Oats.....	99	97	95	29.25	Rye.....	94	94	97	19.25
Barley.....	107	97	97	25.75	Peas.....	64	-	100	18.00
Rye.....	-	-	100	-	Mixed grains.....	91	107	94	28.50
Peas.....	100	95	96	16.00	Potatoes.....	93	-	97	151.50
Mixed grains.....	109	95	97	31.50					tons
Potatoes.....	98	-	98	176.25	Hay and clover.....	80	96	101	1.35
				tons	Alfalfa.....	84	88	91	2.25
Hay and clover.....	95	92	82	1.40	British Columbia—				bush.
				bush.	Fall wheat.....	88	88	97	29.00
Quebec—					Spring wheat.....	89	95	100	25.50
Spring wheat.....	98	100	99	16.50	All wheat.....	89	93	99	26.75
Oats.....	99	103	101	26.75	Oats.....	89	94	101	54.25
Barley.....	98	101	100	23.00	Barley.....	90	93	99	34.00
Rye.....	97	98	96	15.50	Rye.....	98	97	100	-
Peas.....	96	101	99	15.00	Peas.....	96	100	101	27.25
Mixed grains.....	98	100	99	26.00	Mixed grains.....	91	100	99	40.25
Potatoes.....	97	-	101	144.75	Potatoes.....	96	-	96	204.25
				tons	Hay and clover.....	95	90	89	tons
Hay and clover.....	85	98	90	1.50	Alfalfa.....	92	89	88	3.40
Alfalfa.....	102	97	92	2.40					
Ontario—				bush.					
Fall wheat.....	103	99	96	22.75					
Spring wheat.....	87	98	95	19.00					
All wheat.....	94	98	96	22.25					

INTERPRETATION OF CROP REPORTS.

In Table III the condition of crops at the end of June is expressed numerically according to a scale in which 100 represents the average annual yield per acre of the previous ten years 1910-19. The figures expressing the condition for the whole of Canada are averages weighted according to the areas under each crop in each province. From the figures expressing condition, together with knowledge of the decennial average yields per acre, also included in Table II, it is open to any one to interpret the condition on June 30 by the anticipated yield in total bushels. This was actually done last year in the Monthly Bulletin of Agricultural Statistics for July, 1919, pp. 153-156; but it should be pointed out that for wheat the yield anticipated of about 285 million bushels proved to be not more than about 193 million bushels, according to the final estimate published in the Monthly Bulletin of January, 1920, and for oats the yield of about 443 million bushels became similarly reduced to about 394 million bushels. The condition of 100 for wheat and oats on June 30, equivalent to the decennial averages per acre of $16\frac{3}{4}$ bushels for wheat and $33\frac{1}{4}$ bushels for oats, represents, upon the revised estimate of areas sown (Table I), a total yield of about 287,870,000 bushels for wheat and of about 517,217,000 bushels for oats; but the actual yields may differ for two reasons. The estimate of the area upon which the total yield is based is only tentative, being subject to final revision, and the effects of the remaining part of the season of growth may profoundly modify the yields promised. Subject to the caution which these conditions require, any one is free to calculate, from the figures expressing condition at a given date, from the estimate of areas sown, and from the decennial average yields per acre, the yields which the condition promises for each crop for each province and for each crop for the Dominion as a whole.

CROP REPORTS FROM THE PROVINCES.

Summarized from the Reports of Crop Correspondents, June 30, 1920.

Maritime Provinces.—A wet, cold spring retarded the growth of all crops. This was followed by hot, dry weather throughout June, and crops at present are very much in need of rain. In some parts of these provinces a few rains of late have improved crops considerably. Pastures are poor, and hay will be a light crop. Vegetables are doing well. Potato bugs are very thick, but potatoes promise well. Tent caterpillars are prevalent on fruit trees. (*See note on page 159*).

Quebec.—Although the seeding was done under favourable conditions, the lack of rain during May and the first part of June delayed the growing of crops. Conditions, however, have greatly improved with the late rains. Grain is good, and other crops promise well. Hay and pastures are very poor. In several districts clover was killed by frost last autumn, and another frost on May 18 caused damage. In some parts, potatoes appear to be extra good. The old

prairies suffered most from the drought, but the new ones have revived since the rain. Smaller acreage is accounted for by the scarcity of help, high wages and the eight-hour working day.

Ontario.—The dry, cold weather throughout May and June retarded the growth of all crops, but recent rains have improved grains and roots considerably. Hay will be a very light crop. Alfalfa is good. There is a marked increase in the acreage sown to sweet clover, which is being cut green for feed. Pastures are poor, but frequent rains of late may improve them. Wireworms are infesting oats, and cutworms and white grubs are damaging corn in some parts of the province. Potatoes are very good and promise a splendid yield. Our correspondent at Markdale in the county of Grey reports that measuring worms have done the most harm for years to fruit and forest trees. Labour is still scarce.

Manitoba.—Very favourable weather has prevailed during June, and in general all crops show splendid growth, making up for the late spring. Frequent showers have supplied sufficient moisture so far; but in parts heavy rains were needed, as the ground was becoming too dry. High winds caused slight damage by drifting of soil, and hail was reported on June 12 from Neepawa Township. There has however been no damage by frost. The wheat acreage was reduced owing to the late spring, and a larger proportion of fodder corn and green forage was grown. Grasshoppers were troublesome, and farmers were checking them by poison. The potato crop sown was below the average on account of the scarcity and high price of seed potatoes. Vegetables of all kinds are in splendid condition. Prospects are generally good for an excellent harvest.

Saskatchewan.—Though the season was late, favourable weather and ample rainfalls have brought the grains along rapidly; so that crops are on the whole about as far advanced as in a normal season. Wheat was reported to be in shot blade in many places and in Battleford district Marquis wheat was 18 inches high. Reports as to grasshoppers vary, some districts being entirely free, while others have many. In general; however, the damage has not been great so far, and it is hoped that the pest may be kept in check. Pastures are excellent, cattle getting fat and cows giving a good flow of milk.

Alberta.—In the northern parts of the province there were plentiful rainfalls, and all crops were improving rapidly, with the outlook promising for a good average yield of grain. Pastures were remarkably good and cattle doing well. In southern Alberta rainfalls were less general, there being scattered showers, but generally a deficiency; much soil drifting resulted, as high winds were prevalent. Cutworms and grasshoppers were doing some damage. More oats, barley and flax are being grown owing to the late seeding season.

British Columbia.—The weather has been cold and damp throughout June. This has retarded the growth of hay and grain. Grain, especially fall wheat, is in need of rain. Wheat is greatly infested by the mustard weed. Roots are coming along nicely and promise well. Potatoes are very good and of large size.

TELEGRAPHIC CROP REPORTS.

The following telegrams on crop conditions throughout Canada at the end of June, received from the Provincial Departments of Agriculture and the Dominion Experimental Farms and Stations, were issued on July 2 by the Dominion Bureau of Statistics:

Prince Edward Island.—Season favourable for all crops. Cereals growing rapidly and showing good colour. Oats, corn and vegetables have germinated quickly. Strong growth of clover. Grasses not up to first estimates owing to dry May. Timothy heading out. Prospects for hay and pasture average. Large and small fruits have set well and promise a full crop.

Nova Scotia.—Kentville: Precipitation during June has carried crops without any serious check. End of month dry and crops need rain. Grasses and clovers light to medium and maturing rapidly. Cereals looking well. Potatoes fair to good. Roots, corn, fair. Apple set medium and will approximate one million barrels. Fruit free from spot. Amherst: Frosts occurring on the 20th and 24th, combined with lack of precipitation, have been detrimental to good germination and growth. Wheat, oats and barley fair; potatoes and roots fair; small fruit below average; apples good; turnip seed good; hay slightly below average with fair amount of clover in evidence.

New Brunswick: Fredericton: Following extremely dry May, June has given no rain to penetrate ground, but frequent light showers, totalling $1\frac{1}{2}$ inch for month, have germinated seed and helped cultivate crops. Grains, potatoes and corn looking well; hay crop not half average; pastures fair. All seeding except some turnips and buckwheat completed.

Quebec.—Ste. Anne de la Pocatière: June has been too dry. The hay crop below the average. First sown cereals fair to poor. Last sown cereals poor. Field roots only fair. Potatoes late to show up and would require more moisture as would other plants. Small fruit fair to good. Tree fruits promising. Cap Rouge: Garden peas, gooseberries, currants excellent; field peas, oats, cherries, ornamental plants very good. Corn, wheat, potatoes, mangolds, hay, pasture, plums, strawberries, raspberries and squash good. Swedes, carrots, barley, apples, string beans, tomatoes and onions medium. Drought is main cause of trouble. Lennoxville: Excessively dry weather throughout the month of June has been detrimental to hay crop and late sown grains. There is not the usual amount of clover on account of the severe cold weather of the past winter and the high price of clover seed this spring.

Ontario.—From the Ontario Department of Agriculture: June rains greatly helped all field crops. Fall wheat promises good yield; straw short. Spring grains fair. Timothy and clover light. Alfalfa first cut good. Corn looks splendid. Sugar beets prospering, but mangolds disappointing. Tomatoes and other canning crops promising. Strawberries good yield. Other fruit prospects excellent. Live stock thrifty.

Manitoba.—From the Manitoba Department of Agriculture: Crop outlook promising. Growing and maturing rapidly. June showery and moderately warm. Grasshoppers threaten many districts, but have been vigorously poisoned and have been kept under control. Hay crop good. Animals thriving. Conditions fairly uniform over province. Brandon: Rainfall has been light but timely, with no frost during June. Some grasshoppers, but precautionary measures have prevented serious loss as yet. Wheat prospects are fairly good, but more rain is needed at once. Oats and barley are late but vigorous. Hay crop light. Morden: Timely showers have improved conditions. Wheat looking well; other crops average, but somewhat later than usual. Potatoes and garden crops average. Wireworms and cutworms prevalent. No grasshopper damage in this section, and no injury from late frost.

Saskatchewan.—From the Saskatchewan Department of Agriculture: Wheat is now in shot blade in nearly all parts of Saskatchewan. Generally speaking there is plenty of moisture in the ground, and intermittent showers from now on should assure a good crop. Grasshopper war being waged with good success, and com-

paratively little damage has been sustained from this pest. Excellent reports received from Swift Current District. Wheat heading out at Dundurn. Pastures and hay promising splendid crop. Coarse grains making good growth. Cattle improving rapidly. Indian Head: Crop conditions generally slightly above average, although grain crops hardly so far advanced as usual. Hay crops all 10 to 20 p.c. above average. Hoed crops 10 p.c. above average, except corn which requires more heat. Some damage reported from grasshoppers and cutworms, but all outbreaks under control. Scott: Rainfall recorded at Scott for June amounts to 2½ inches. Early sown wheat 18 inches high. Late sown crop short. Weeds unusually numerous particularly in stubbled-in fields. Hay and pasture crops have made rapid growth, consequently live stock have thriven unusually well. Rosthern: All grain crops best since 1916, but rain needed seriously, or by middle of July premature heading and ripening will prevent good yield. Hay crops short. Root crops normal. No insect pests of any kind affecting crops.

Alberta.—From the Alberta Department of Agriculture: Crop conditions over the province generally favourable. Rains adequate, except north of Lethbridge. Cutworms some damage north of Lethbridge. Grasshoppers have appeared between Lethbridge and Cardston, also Claresholm and Staveland north. Grasshoppers being vigorously met. General prospect of grain and pasture best in five years. Slightly late, but advancing very rapidly at present. All live stock in excellent shape. Lacombe: During June, 1½ inch rain fell here. Weather has been favourable for crops with no damage from frost, cutworms or grasshoppers. Grain crops promising. Hay short. Rain needed from Olds south. Northeastern part of province also dry. Fall rye good crop all over. Lethbridge: Weather conditions for crop development during June in southern Alberta have only been fair. Severe soil drifting took place west and north of Lethbridge. Showers that have occurred have been heavier in some localities than others, resulting in great irregularities in conditions. General rains are needed. Cutworms have done damage in some localities. Grasshoppers increasing, but situation apparently well in hand.

British Columbia.—From the British Columbia Department of Agriculture: Condition of all crops at the end of June most promising. Considerable rainfall during the early part of the month followed by warm weather during the end of June proved very beneficial to all crops. Hay is in healthy condition, but somewhat slow in growth. All root crops making good growth. Invermere: Although the season has been very backward, the crops are in good condition and growing rapidly. The hay crop is below the average, but pastures are only fair. Spring cereals are looking fine, and with good weather and irrigation should equal last season. The root crop has suffered considerably from cutworms. Summerland: Okanagan crops are at present hard to estimate. Pears heavy, peaches good, apricots good, cherries fair, apples good. This spring it has been difficult to estimate crop. Bloom was excellent, but cold weather made pollenization poor. June drop has been heavy. Sidney, V.I.: Weather conditions very favourable to all crops. Satisfactory growth was recorded for grains, grasses, fruits and vegetables. Haying has commenced. Will be two-thirds crop. Wheat has headed out and will be two-thirds crop. Live stock in good condition. Agassiz: June with precipitation of 8.29 inches is wettest for 20 years. The growth of most crops is rank. Pasture and hay crops exceptionally good, also cereals. The root crop is good, but late and weedy. Excessive moisture made weed control almost impossible. Corn crop late.

INFLUENCE OF THE WEATHER UPON SPRING WHEAT.

Table I (page 157) presents the records collected during June from crop correspondents as to the appearance above ground of spring wheat and the dates of heading and flowering. Out of 65 replies, 46 report germination during the first week of June. The majority of reports of heading, viz., 74, were observed during the last week of June in Ontario and Manitoba. In the other provinces this stage will not be reached until July.

I.—Dates of Appearance above Ground, Heading and Flowering of Spring Wheat, 1920.

Province and District.	Appearance above Ground.			Heading.			Flowering Stage.		
	No. of replies.	June 1-7.	June 8-14.	June 15-21.	June 22-30.	No. of replies.	June 1-7.	June 8-14.	June 15-21.
Prince Edward Island.....	10	10	-	-	-	-	-	-	-
Nova Scotia.....	19	15	3	1	-	-	-	-	-
New Brunswick.....	5	4	1	-	-	-	-	-	-
Quebec—									
North of St. Lawrence.....	3	1	-	1	1	1	-	-	-
South.....	6	2	2	2	-	1	-	-	-
Eastern Townships.....	-	-	-	-	-	1	-	-	-
Montreal Counties.....	1	1	-	-	-	4	1	1	-
Ontario—									
Eastern.....	3	1	-	1	1	11	-	-	2
Central.....	2	-	-	-	2	17	1	-	1
Western.....	2	2	-	-	2	16	1	-	1
Southern.....	3	2	1	-	-	17	1	-	1
Northern.....	-	-	-	-	-	2	-	-	4
Manitoba—									
Eastern.....	-	-	-	-	-	-	-	-	-
North Central.....	2	1	-	1	-	4	-	-	-
South.....	2	2	-	-	-	6	-	-	-
North Western.....	3	2	1	-	-	5	1	-	-
South.....	-	-	-	-	-	5	-	-	-
Saskatchewan—									
North.....	-	-	-	-	-	-	-	-	-
South.....	-	-	-	-	-	3	-	-	-
Alberta—									
North.....	3	2	1	-	-	-	-	-	-
South.....	1	1	-	-	-	1	-	-	-
British Columbia.....	-	-	-	-	-	-	-	-	-

Table II compares the same records, by provinces, with those received during the same periods last year. Part A refers to "Appearance above Ground." By comparing the figures in B, "Dates of Heading," it will be observed that the number of replies are considerably less than those received last year and that the season is comparatively later. The replies recorded in part C, "Dates of Flowering", are fewer in proportion.

II.—Dates of Appearance above Ground, Heading and Flowering of Spring Wheat, 1919 and 1920.

A.—DATES OF APPEARANCE ABOVE GROUND.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Number of records of appearance above ground.....	4	10	32	19	—	5	22	10	23	10
June 1-7.....	3	10	16	15	—	4	18	4	11	5
June 8-14.....	—	—	11	3	—	1	4	2	2	1
June 15-21.....	1	—	2	—	—	—	—	3	8	1
June 22-30.....	—	—	3	1	—	—	—	1	2	3

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Number of records of appearance above ground.....	3	7	—	—	—	4	—	—	84	65
June 1-7.....	3	5	—	—	—	3	—	—	51	46
June 8-14.....	—	1	—	—	—	1	—	—	17	9
June 15-21.....	—	1	—	—	—	—	—	—	11	5
June 22-30.....	—	—	—	—	—	—	—	—	5	5

B.—DATES OF HEADING.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Number of records of heading.....	—	—	—	—	—	—	4	6	96	63
June 1-7.....	—	—	—	—	—	—	—	—	2	2
June 8-14.....	—	—	—	—	—	—	—	—	2	4
June 15-21.....	—	—	—	—	—	—	1	—	26	12
June 22-30.....	—	—	—	—	—	—	3	6	66	45

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Number of records of heading.....	120	20	68	3	10	1	2	—	300	93
June 1-7.....	1	—	—	—	—	—	—	—	3	2
June 8-14.....	—	—	—	—	—	—	1	—	3	4
June 15-21.....	17	1	2	—	1	—	—	—	47	13
June 22-30.....	102	19	66	3	9	1	1	—	247	74

II. Dates of Appearance above Ground, Heading and Flowering of Spring Wheat, 1919 and 1920—concluded.

C.—DATES OF FLOWERING.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Number of records of flowering.....	—	—	—	—	—	—	2	1	19	10
June 1-7.....	—	—	—	—	—	—	—	—	1	—
June 8-14.....	—	—	—	—	—	—	—	1	—	—
June 15-21.....	—	—	—	—	—	—	—	—	4	2
June 22-30.....	—	—	—	—	—	—	2	—	14	8

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Number of records of flowering.....	24	—	1	—	—	—	1	—	47	11
June 1-7.....	—	—	—	—	—	—	—	—	1	—
June 8-14.....	—	—	—	—	—	—	—	—	—	1
June 15-21.....	2	—	—	—	—	—	—	—	6	2
June 22-30.....	22	—	1	—	—	—	1	—	40	8

PRINCIPAL POISONOUS PLANTS OF CANADA.

Bulletin No. 39, recently issued by the Department of Agriculture, and entitled "Principal Poisonous Plants of Canada," should prove of considerable practical value to farmers. Written by Miss Faith Fyles, B.A., Assistant Botanist, Dominion Experimental Farms, Ottawa, it runs to 112 8vo. pages and contains 44 coloured plates, or other full page illustrations, all of them drawn by the authoress. Whilst the bulletin is a valuable one to those engaged in botanical studies the main object of its publication is to give the farmer and stock-raiser a means of recognizing and identifying such poisonous plants as may occur on his pastures and ranges. The symptoms of poisoning are described and the methods of treatment indicated. Amongst the more common poisonous plants dangerous to live stock are the ergot of rye, the loco weed, the hemlocks and the ragwort. These are all well illustrated and can thus be easily identified. Crop correspondents and other readers of the Monthly Bulletin who desire a copy of this publication should apply to the Publications Branch, Department of Agriculture, Ottawa.

TENT CATERPILLARS IN THE MARITIME PROVINCES.

Reports of serious injury by tent caterpillars have been received from the provinces of Nova Scotia and New Brunswick. One of our crop correspondents claims that acres of poplar and white birch trees have been defoliated. Specimens of the Forest Tent Caterpillar, nearly full grown, were received at Ottawa in the first week of July about which time the injury for the present year had ceased.

This outbreak has been investigated by resident entomologists of the Department of Agriculture in the above provinces. In some places in New Brunswick the caterpillars have been present in such numbers on the railway tracks as actually to stop the trains. In the latter province the natural control of the insect has been specially studied. The Entomological Branch of the Department of Agriculture has republished Circular No. 1, on Tent Caterpillars, and those interested in the infested areas may obtain copies of the circular on application.

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—June opened with a very warm spell and with heavy rains, but the mean temperature of the month is 66·14, compared with 71·10 last year. The highest recorded is 91·8 and the lowest 43; while, for the corresponding period of 1919, the maximum was 96 and the minimum 44. The precipitation, which came on thirteen different days, totals 3·25 inches, which is more than usual; while a year ago it amounted to 2·36 inches. The bright sunshine averages 8·38 hours a day, as against 10·11 hours per day this time last year.

Until the last days of the month, when some further showers were experienced, vegetation was suffering from drought, but the prospects are now for a fair yield of grain; while roots and potatoes are doing fairly well. Corn has made slow progress on account of the comparatively cool weather. Hay has made thin growth and will be a light crop, partly on account of the winter-killing of clover and partly on account of the drought.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—"Frequent beneficial showers during the first three weeks of June have made a favourable season for all crops. Cereals are growing rapidly, and have a dark, healthy colour. Roots, corn and vegetables germinated quickly, and have made strong growth. Hay and pastures are not quite coming up to earlier expectations, owing to the drought of May. The timothy is heading out, and, where there has been a thick bottom, there should be a heavy crop. Hay and pasture in general, however, promise to be above the average. Large and small fruits have set well, and there should be a full crop. During June there has been rather a falling off in egg production in the laying contest being carried on at the Station."

Kentville, N.S.—W. S. Blair, Superintendent, reports:—"The temperatures recorded during June have ranged lower than a year ago, but the mean, 58·1, is practically the same as the average for this month during the six previous years. The precipitation, most of which fell on the 6th and the 19th, totals 2·98 inches; while the average for June from 1914 to 1919 was 2·96 inches. The showers were very welcome, as, at the beginning of the month, crops, especially clover and grasses, were suffering from drought, and hay prospects have not been very promising. The bright sunshine aggregates 232·6 hours, as against 163·7, the average for the corresponding

period of the six previous years. Early planted potatoes are looking promising, but the fields planted late have not made a vigorous start. Cereals as a rule are a good colour, but on poor areas there are indications that growth is being checked. Because of the dry season, pastures are not up to the average, and, without more abundant rainfall, are not likely to be able to carry stock very well. Roots and corn have made but fair growth, while late-seeded turnips are making a very irregular showing. Conditions for the early blossoming apple trees were favourable, but the later blossoming varieties have had less sunshine. The fruit has set fairly well and is reasonably free from apple scab, and the yield is expected to be about one million barrels."

Nappan, N.S.—W. W. Baird, Superintendent, reports:—"The weather during June has been exceptionally fine, with less precipitation and more sunshine than usual, and a mean temperature which is about normal. These conditions have expedited the getting in of farm crops, practically all of which, in this district, are in at the close of the month. The rainfall totals 2.68 inches, recorded on eight different days, which has not been adequate after the light rainfall of May, and some of the crops have been suffering materially from drought. Hay promises to give a light yield, and the prospects are that grain and hoed crops will also give lighter yields than usual. Serious damage to crops from army worms, cutworms and caterpillars is reported from the surrounding districts."

Fredericton, N.B.—W. W. Hubbard, Superintendent, reports:—"While the dry weather of May continued more or less through June, there has been enough precipitation to give satisfactory growth to all cultivated crops, except on sandy or gravelly ridges. The hay crop, however, has suffered for lack of rain. Low night temperatures have been experienced, and, in a few locations, frost did some damage. At the Experimental Station, with the moist soil here, conditions have been favourable, and all crops, except hay, look unusually vigorous. Fruits have set extra well, and, with thorough spraying, insects and diseases have been successfully combated. Along the Upper St. John, considerable fertilizer injury to the potato crop is reported; but, in the main, while the potato plants have been coming irregularly, the stand may be said to be good. Grains are showing good growth and colour. Pastures are better than might be expected under dry conditions, and live stock is doing well."

Ste. Anne de la Pocatière, Que.—Jos. Begin, Superintendent, reports:—"June has been dry and windy, with a mean temperature below the average. The highest temperature recorded is 81.2, the lowest 34 and the mean 58, compared with a maximum of 95.2, a minimum of 34.6 and a mean temperature of 61.3, in June, 1919. The precipitation totals only 1.07 inch, rain falling on six different days; while for the corresponding period of last year it amounted to 4.22 inches, recorded on fifteen different days. The bright sunshine averages 7.73 hours a day, a fraction more than the usual for this month. The earlier sown cereals, though rather short and pale looking, seem to resist the drought fairly well; but the grain put in

the ground later is coming up slowly and looks rather poor. Hay has made short and rather thin growth, and is not likely to yield more than four-fifths of an average crop in this part of the province. Potatoes seem to stand the drought better than other plants, and have made a very hopeful start. Earlier sown mangolds remain short. Turnips are doing well and are promising. A good rain would be of much benefit to pastures and to all crops."

Cap Rouge, Que.—G. A. Langelier, Superintendent, reports:—"The meteorological records kept here show that June of this year has been warmer, wetter and brighter than the average for this period of the last eight years, the figures being, respectively, 62.20 and 59.18 for mean temperature, 4.76 and 4.43 inches for precipitation, and 225.0 and 204.3 hours for bright sunshine. From the 7th to the 29th, there prevailed a severe drought, which has considerably reduced the expected yield of hay and has left pastures with less carrying capacity than usual. The other crops, however, are very promising. At the Station, a great deal of attention has had to be given to cultivating, hoeing, and spraying, in order to combat weeds, insects, and fungous diseases. The ever-increasing prices of all commodities have set farmers thinking, and the result is likely to be the formation of associations for buying and selling."

Lennoxville, Que.—J. A. McClary, Superintendent, reports:—"The highest temperature recorded during June is 85, the lowest 35 and the mean 59.44; compared with 93 and 30 and a mean of 64.33 a year ago. The sunshine aggregates 220.1 hours, compared with 248.7 hours in the corresponding period of last year. The precipitation totals 2.22 inches, as against 3.19 inches in the previous June. The weather throughout the month has been quite dry. This has been very detrimental to the hay crop, which will be below the average in this district. Late sown grain is coming on rather slowly. With the shortage of labour, it is probable that farmers will start haying at once."

Brandon, Man.—W. C. McKillican, Superintendent, reports:—"The earlier part of June was favourable for crop development. Light rains during the last week of May and the first of June were sufficient for immediate needs, and the crops made a good start. Then a dry period set in, and conditions rapidly became less favourable, so that, at the end of the month, the earlier crops, excepting those on summer-fallow, are suffering severely from drought. Late crops would still respond to rains, but they must come soon. The temperatures recorded during the month are about normal; there has been no frost. Hay crops are light, on account of lack of rainfall. Corn has done very well so far this season."

Indian Head, Sask.—N. D. Mackenzie, Superintendent, reports:—"The weather during June has not been warm enough to promote the best growth, and grain crops generally are rather backward. This also applies to corn. Roots and hay, however, have made excellent growth and should yield considerably above average. Serious outbreaks of cutworms and grasshoppers have been reported, but the

various municipalities have taken charge and are keeping the pests fairly well under control. Weeds are very numerous this year, and it is difficult to keep them in check, as, in many cases, they have come on faster than the crops. Work on the Experimental Farm has consisted mainly in ploughing summer-fallow and cultivating and hoeing corn and roots. Crops on the Farm promise well, and, on account of being well sheltered by windbreaks, have suffered less from the winds than those of the surrounding country."

Rosthern, Sask.—Wm. A. Munro, Superintendent, reports:—"Frequent showers during June have carried the grain crops along so that they are more advanced at the end of the month than they have been since 1916 at the same date. Hay is light, evidently because of the previous two years being so deficient in moisture. Garden and hoed crops are making splendid growth."

Scott, Sask.—M. J. Tinline, Superintendent, reports:—"Moderate weather conditions have prevailed during June. There have been well distributed showers, and the rainfall totals 2.47 inches. At the end of the month, early sown wheat measures eighteen inches. There is a considerable acreage of late sown oats. All late sown crops are short and will require favourable weather conditions in order to mature before autumn frosts. Hay and pasture crops have made vigorous growth, and live stock on the ranges has thriven remarkably well. At the Station, heavy crops of small fruits have set, and flowering shrubs have bloomed freely, thanks to the absence of spring frosts."

Lacombe, Alberta.—B. C. Milne, Assistant to the Superintendent, reports:—"Growth at this Station during June has been rapid; the crops are now as far ahead as last year, and the prospects for good yields are even better. The rainfall totals 1.50 inch, which has been sufficient for the immediate needs of all grain crops. No damage has been experienced from cutworms, frosts, or winds, during the month. Hay crops will be light, especially in the southern and eastern sections of central Alberta, where there has been very little rain. Pastures are good in this district, and live stock is doing well. Markets for live stock have weakened considerably towards the end of the month."

Lethbridge, Alberta.—W. H. Fairfield, Superintendent, reports:—"The month of June has been a dry one at this Station. This condition seems to be somewhat localized, including Lethbridge, Wilson Siding, Nobleford, Commerce, Monarch and Pearce. The districts outside of the area mentioned have received more or less precipitation, and the crop prospects are quite favourable in all save this limited area. The Foremost district appears to be particularly favoured. In the Pearce-Nobelford district, considerable soil drifting has taken place, resulting, in some instances, in the loss of 75 p.c. of the crop from seed being blown out and plants being cut off at the base. It is difficult to estimate accurately the extent of the damage done, as the total loss ranges from 75 p.c. down to about 25 p.c. of the area seeded in that particular section. Dry land alfalfa is making a good showing this year, and, from present indications, will yield a good crop of hay. Winter rye, under the same conditions, is also doing well, as its

root system is sufficiently developed to make use of the moisture below the surface. Irrigated crops are progressing satisfactorily, and the first cutting of alfalfa will take place shortly. There have been several outbreaks of grasshoppers and cutworms in various districts in the southern part of Alberta. The grasshopper situation is being satisfactorily dealt with by federal and provincial officials in co-operation with the farmers' organizations in the affected districts, but the same success has not attended the measures adopted to cope with the cutworms."

Invermere, B.C.—R. G. Newton, Acting Superintendent, reports:—"June, like the previous month, has been very cool, the mean temperature of 53.5 being the lowest for this time during the past seven years. However, there have been no destructive frosts, the lowest readings of the thermometer being 31, which was registered on two occasions. The rainfall has been light, being 0.8 of an inch, as compared with 1.6 inch as the average for the corresponding period of the past seven years. The hay crop is slightly below normal; but cereals, while backward, are looking very promising, and with favourable weather should be better than usual. Cutworms have been very destructive to the mangolds this season; while it has been necessary to re-sow the turnips."

Summerland, B.C.—R. H. Helmer, Superintendent, reports:—"June has been exceptionally cool as compared with 1919 and 1918. The June drop in all orchard crops has been heavy. In cherries, poor pollenization is apparent. All crops are likely to be lighter than anticipated. In most places the first cutting of alfalfa is ready. Live stock is in good condition, and the range is excellent for this time of the year. The backward weather has kept the water in the mountains, and the creeks have not been high, but they are keeping up very well."

Agassiz, B.C.—W. H. Hicks, Superintendent, reports:—"The past month, with a total precipitation of 8.39 inches, is the wettest June for twenty years. All crops have made rapid, rank growth, and especially hay, pasture and cereals. The excessive rainfall has made it difficult to control weeds in the garden and in the fields sown to hoed crops. Roots, in particular, are weedy, while corn, generally speaking, is both weedy and late. Potatoes are promising. Live stock of all kinds is in good condition, and the demand for choice stock is excellent."

Sidney, Vancouver Island, B.C.—Lionel Stevenson, Superintendent, reports:—"During June, conditions have been favourable to the growth and development of all staple crops. More rain than usual has been experienced. The closing days of the month have been warm and ideal for haying. Potatoes and roots have made satisfactory growth. Vegetables and seed crops have developed well. Pastures are beginning to fail at the end of the month. Live stock is in good condition, and there is a good demand for dairy cows. Young poultry have developed fairly well, while egg production has been abundant. Prices for stock and eggs have been only fair. Feed

costs very high. Sour cherries, pears, and plums promise to be the most abundant of the orchard fruits, all other lines being short."

Meteorological Record for June, 1920.

The records of temperature, precipitation and sunshine at the Experimental Farms and Stations for the month of June are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature, F.			Pre- cipita- tion in inches.	Hours of Sunshine.	
	Highest.	Lowest.	Mean.		Possible.	Actual.
Ottawa, Ont.....	91.80	43.00	66.14	3.25	469	251.4
Charlottetown, P.E.I.....	79.00	38.00	57.82	2.49	471	247.5
Kentville, N.S.....	84.00	34.00	58.10	2.98	467	232.6
Nappan, N.S.....	78.00	30.00	56.54	2.68	470	211.0
Fredricton, N.B.....	84.50	36.00	61.30	1.67	471	223.7
Ste. Anne de la Pocatière, Que.....	81.20	34.00	58.00	1.07	476	232.4
Cap Rouge, Que.....	85.00	40.20	62.20	4.76	474	225.0
Lennoxville, Que.....	85.00	35.00	59.44	2.22	468	220.1
Brandon, Man.....	90.00	41.00	58.40	1.86	488	242.9
Indian Head, Sask.....	87.00	38.00	58.50	2.10	490	241.0
Rosthern, Sask.....	81.20	33.40	58.79	1.25	505	316.2
Scott, Sask.....	80.50	29.40	56.50	2.47	502	246.9
Lacombe, Alberta.....	79.80	26.90	54.53	1.50	501	264.5
Lethbridge, Alberta.....	81.00	29.00	55.66	0.40	488	301.1
Invermere, B.C.....	85.00	31.00	53.50	0.80	492	231.4
Summerland, B.C.....	90.00	40.00	59.70	0.98	489	239.5
Agassiz, B.C.....	85.00	40.00	60.00	8.39	485	122.4
Sidney, Vancouver I., B.C	79.50	37.50	56.30	1.17	482	210.8

Ottawa, July 14th, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

PRODUCTION OF FLAX FOR FIBRE.

Information furnished by the DIVISION OF ECONOMIC FIBRE PRODUCTION, Central Experimental Farm, Department of Agriculture, Ottawa.

In 1919, 19,262 acres of flax for fibre were grown in Ontario, 800 acres in Quebec and 200 acres in Manitoba, making a total area of 20,262 acres for Canada, as compared with 20,000 acres in 1918, and 8,000 acres in 1917, grown in Ontario. The average yield per acre in 1919 of pure linen fibre was 218 lb., which was valued at from 80 cents to \$1 per lb. according to grade. Although the yield per acre was much lower than that of 1918, viz., 310 lb. per acre, the quality was more uniform. There were in addition 1,162 tons of coarse tow, which was graded at prices ranging from 18 cents to 32 cents per lb.

In order to safeguard the Canadian export trade to Ireland in flax fibre seed, through the maintenance of a uniform standard of high quality, the Department of Agriculture provided for an inspection and grading service for the flax fibre seed crop of 1919, the grade standard being fixed as follows:

GRADE STANDARD FOR ONTARIO FIBRE FLAX SEED IN 1919.

Flaxseed for seeding purposes shall be mature, sound, dry and sweet, shall be practically free from seeds of other cultivated plants, shall be free from noxious weed seeds within the meaning of the Seed Control Act (one noxious weed seed per oz.), shall be well cleaned and graded to remove light and damaged kernels, common weed seeds and other foreign matter, and shall be capable of germinating at least 90 p.c. Certificates of this grade may be issued for Ontario fibre flax, providing the seed is accompanied by an affidavit of pedigree or certificate of registration sent to the Chief Seed Inspector.

There were 90,000 bushels of inspected seed shipped to Ireland, the price realized being \$10.75 per bushel, f.o.b. the mills in Canada.

The following is a statement of the area, yield and value of flax grown for fibre and of allied products for each of the years 1915 to 1919.

I.—Production and Value of Flax Fibre and Allied Products, 1915-19.

Description.	1915	1916	1917	1918	1919
Area.....acres	4,000	5,200	8,000	20,000	20,262
Yield of fibre per acre..... lb.	200	57	350	310	218
Yield of fibre..... tons	800	300	1,400	3,100	2,208
Yield of tow..... "	80	175	—	900	1,162
Yield of flax straw..... "	—	800	—	—	—
Yield of seed per acre..... bush.	12	48	9	8 ¹	—
Yield of seed..... "	48,000	25,000	72,000	110,000 ¹	90,000 ²
Value of fibre per ton..... \$	400	600	1,100	350	1,800
Value of fibre..... \$	320,000	180,000	1,540,000	1,085,000	3,975,400
Value of tow..... \$	2,800	5,000	—	270,000	581,000
Value of flax straw per ton..... \$	—	15	—	—	—
Value of flax straw..... \$	—	12,000	—	—	—
Value of seed per bush..... \$	1.60	3	5.50	8.50 ¹	10.75 ²
Value of seed..... \$	76,800	75,000	396,000	930,769 ¹	967,500 ²
Total value of all products. \$	399,600	272,000	1,936,000	2,285,769	5,523,900

¹ Seed of fibre quality shipped to Ireland.

² Inspected seed shipped to Ireland.

It will be seen from the table that for 1919 the total value of all flax fibre products amounted to \$5,523,900, as compared with \$2,285,769 in 1918 and with \$399,600 in 1915, the first year of record.

According to the annual Census of Industry, the production of Canadian flax scutching mills in 1918 was as follows:

II.—Production of Canadian Flax Scutching Mills, 1918.

Description.	Lb.	\$	Description.	Bush.	\$
Line fibre.....	1,178,226	720,166	Flaxseed.....	50,428	398,347
Flax tow.....	997,068	191,000	Other products ¹	—	562,780
			Total value.....	—	1,872,293

¹ Include seed, straw, etc., for which quantities were not given.

The following is a statement of the imports and exports of flax fibre, flax tow and fibrilla for the fiscal years ended March 31, 1917, 1918, and 1919:

III.—Imports and Exports of Flax Fibre, Flax Tow and Fibrilla, 1917-19.

Fiscal Year.	1917.		1918.		1919.	
	Cwt.	\$	Cwt.	\$	Cwt.	\$
Imports.....	1,735	23,705	1,559	14,489	5,533	71,566
Exports.....	22,216	277,149	12,007	370,241	51,010	827,327

The growth on a commercial scale of flax for fibre and especially of flax fibre seed for export to Ireland is a new industry in Canada, resulting directly from the war and dating from the year 1915. It bids fair to have important future developments. At present there are about 32 flax scutching mills in Canada, all of them, except one, in Ontario, for the manufacture of yarn, tow and other products from Canadian grown flax fibre. Efforts are being made to establish in Canada a flax spinning industry for spinning the yarn into linen and other fabrics; but difficulties are being experienced in obtaining the necessary spinning machinery. The successful establishment in Canada of the flax growing industry in all its branches is desirable both from an industrial and agricultural point of view, and the present prices should yield remunerative returns to manufacturers and producers of the raw material.

According to a memorandum furnished by the Division of Economic Fibre Production on July 27, 1920, the acreage under flax for fibre in Canada this year (1920) is 31,300 acres, or 1,030 acres more than in 1919. A field crop inspection made a few weeks ago indicated that there was every prospect of a good crop of both fibre and seed. There were approximately 100 tons of flax fibre in Canada at the time of this inspection, at prices ranging from \$1 to \$1.40 per lb.; but it was expected that this would be disposed of during the next week or ten days.¹

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Board of Agriculture reports (July 1) that on the whole June was a favourable month for crops and farm work, though frosts early in the month checked growth in some districts and showery weather towards the end interfered with hay making. Generally there was enough rain, though in a few districts

¹ For previous articles relating to flax for fibre, see Census and Statistics Monthly, Vol. IV, 1911, pp. 64, 117; Vol. V, 1912, p. 91; Vol. VI, 1913, p. 17; Vol. IX, 1916, p. 30; Vol. X, 1917, p. 25; Monthly Bulletin of Agricultural Statistics, Vol. XI, 1918, p. 42; Vol. XII, 1919, p. 136.

more was wanted at the end of June. The grain crops generally improved during June. Wheat is the most promising of the three chief grain crops and is coming into ear well, but there is a proportion of thin plants in most districts. The most satisfactory results are expected in the southeastern counties, and in the eastern counties about average yields may be looked for. Barley has also done well during June, though often it is still rather backward and thin, and the yield may be a little under average. Oats are less satisfactory and are very variable; as a rule the spring sown are thin and patchy and short in the straw in many districts. Beans have podded well and continue to promise very satisfactory crops, and peas, though not quite so good, may be expected to yield over-average crops. Potatoes were damaged by the late frosts which occurred in several districts early in June, but they have grown well since then. Owing to the late planting they are, however, backward. Early potatoes are giving satisfactory results. Hay-making is well advanced in some southern districts and has been begun in practically all parts of the country. Some good hay has been secured, but work has been delayed by the showery weather. Crops have improved with the good growing weather and are considered slightly heavier than they promised a month ago. Grass has grown well and there is plenty of pasturage, and sheep have made good progress. The supply of labour is sufficient for requirements as a rule. There is very little unemployment among regular agricultural workers, and in some districts enough temporary labour cannot be secured for root thinning and hay-making.

South Australia.—The Government Statist reports (June 1) that the preliminary estimate of the production of wheat in the state of South Australia for the season of 1919-20 is 14,947,413 bushels from 1,921,515 acres sown for grain, as compared with 22,936,925 bushels from 2,186,349 acres in 1918-19. The yield per acre for 1919-20 is 7.78 bushels as compared with 10.49 bushels the previous year. Of barley the yield for 1919-20 is 2,339,028 bushels, a decrease of 78,321 bushels, and of oats 1,605,568 bushels, a decrease of 64,965 bushels. The yield of wheaten hay is 462,055 tons, and of oaten hay 121,804 tons, in addition to from 9,000 to 10,000 acres of other hay.

India.—The third wheat forecast issued by the Indian Department of Statistics (May 31) reports that the total area under wheat for the year 1919-20 is now placed at 29,864,000 acres, as compared with 23,805,000 acres, the final estimate of 1918-19. The increase is therefore 6,058,000 acres, or 25 p.c. The total yield is estimated at 376,880,000 bushels, as compared with 280,485,000 bushels last year, an increase of 96,395,000 bushels, or 34 p.c. The average yield per acre for the whole of India is 12.6 bushels, as against 11.7 bushels in 1918-19. The final general memorandum on winter oil seeds issued June 1, states that the total area under rape and mustard is 6,016,000 acres, which is 23 p.c. above the finally revised area of last year. The total estimated yield is 46,960,000 bushels, as against 30,520,000 bushels last year, an increase of 54 p.c. The total area

under flaxseed amounts to 3,101,000 acres, which is 5·6 p.c. above the area of last year. The yield is estimated at 17,320,000 bushels, as against 9,400,000 bushels last year, an increase of 84 p.c.

France.—The French wheat crop of 1920 is placed provisionally at 227,280,000 bushels from 11,364,000 acres, an average of 20 bushels per acre. In addition, the production of Alsace-Lorraine is estimated at 8 million bushels from 500,000 acres, an average per acre of 16 bushels and that of northern Africa at 36 million bushels from 3 million acres, an average of 12 bushels per acre. (*Mark Lane Express, July 12, 1920.*)

Spain.—The wheat crop of Spain for 1920 is estimated at 160,-720,000 bushels from 10,045,000 acres. The average home consumption being about 160,000,000 bushels, the country should this year be self-supporting, instead of having to import as usual about 6,000,000 bushels. (*Mark Lane Express, July 12, 1920.*)

Italy.—According to Broomhall (July 13) the 1920 wheat crop of Italy is officially estimated at the low figure of 148 million bushels. The average yield for the period 1913-17 was 177,042,000 bushels.

Prussia.—According to the German Bureau of Agricultural Statistics, the condition of crops in Prussia in June, 1920, as compared with May 1920 and June, 1919, was as follows:—

Crop.	June 1919.	May 1920.	June 1920.	Crop.	June 1919.	June 1920.
Winter wheat.....	2·7	2·7	2·6	Spring barley.....	2·8	2·6
Spring wheat.....	2·9	—	2·6	Oats.....	2·9	2·6
Meslin.....	2·8	2·6	2·3	Potatoes.....	2·7	2·7
Winter rye.....	2·9	3·1	3·1	Sugar beet.....	2·9	2·6
Spring rye.....	3·0	—	2·8	Mangolds.....	3·1	2·8
Winter barley.....	2·9	2·8	2·7	Flax.....	2·9	2·7

In the scale employed for expression of the condition of crops, 1=very good, 2=good, 3=average, 4=poor, 5=very poor.

Hungary.—The English Board of Trade Journal of July 1, 1920, contains a report from the British Commercial Commissioner at Budapest, who quotes an estimate, made by Mr. E. Bacher, a Hungarian milling expert, that the cereal harvest of Hungary for the current year will admit of the exportation of 44,626,400 bushels of wheat, and 21,515,200 bushels of rye after providing for the needs of the country. These figures, it is stated, may be overestimated, but there is no doubt that a considerable quantity will be available for export. The total yields of these crops in Hungary before the war (1913) were 168,249,000 bushels of wheat and 56,000,000 bushels of rye.

Argentina.—The U.S. Consul General at Buenos Aires reports (June 30) that the exportable surplus of wheat in Argentina on June 30 was 29,909,073 bushels, as compared with 53,277,833 bushels on June 1, a reduction of 23,368,760 bushels during the month. (*U.S. Market Reporter, July 10,, 1920.*)

United States.—The Crop Reporting Board of the United States Department of Agriculture has issued (July 9) the following estimates of the areas under the principal field crops:—

Crop.	Acres.	Per cent of 1919.	Crop.	Acres.	Per cent of 1919.
Winter wheat.....	34,165,000	68.5	Rye.....	5,470,000	77.4
Spring wheat.....	19,487,000	83.5	White potatoes.....	3,849,000	95.9
All wheat.....	53,652,000	73.3	Tobacco.....	1,859,700	97.8
Corn.....	103,648,000	101.5	Flax.....	1,706,000	101.4
Oats.....	41,032,000	96.8	Rice.....	1,345,700	123.5
Barley.....	7,437,000	100.2	Cotton.....	35,504,000	101.1

The following statement gives the condition at July 1 and the total estimated production in millions of bushels, tons or pounds of the crops named, together with the comparative figures of previous years:—

Crop.	Condition in per cent of normal.				Yield per acre.			Total yield in millions of bushels, tons or lb.			
	July 1 1919.	June 1 1920.	July 1 1920.	July 1, ten year average.	1919.	1920 ¹ .	Average 1914-1918.	1919.	June forecast, 1920 ¹ .	July forecast, 1920 ¹ .	Average 1914-1918.
	p.c.	p.c.	p.c.	pc.	bush	bush.	bush.	bush	bush.	bush.	bush.
Winter wheat.....	89.0	78.2	79.7	81.2	14.7	15.2	15.6	732	504	518	563
Spring wheat.....	80.9	89.1	88.0	82.4	9.0	15.0	12.7	209	277	291	259
All wheat.....	86.6	81.7	82.5	81.6	12.8	15.1	14.6	941	781	809	822
Corn.....	86.7	—	84.6	83.8	28.6	26.8	26.1	2,917	—	2,779	2,760
Oats.....	87.0	87.8	84.7	84.3	29.4	32.2	32.1	1,248	1,315	1,322	1,415
Barley.....	87.4	87.6	87.6	84.3	22.3	26.0	25.1	166	185	193	215
Rye.....	85.7	84.4	83.5	86.7	12.5	15.0	15.5	89	80	82	60
White potatoes...	87.6	—	89.3	86.5	89.2	100.7	95.2	358	—	388	382
Flax.....	73.5	—	89.1	82.3	5.3	8.4	7.5	8.9	—	14.4	12.9
Rice.....	89.5	—	90.0	88.4	37.7	38.7	35.7	41.1	—	52.1	33.4
Hay.....	90.7	87.9	85.5	82.8	1.62 ton	1.51 ton	1.45 ton	91.3 tons	84.7 tons	84.8 tons	81.4 tons
Tobacco.....	83.6	—	84.3	82.2	730.8 lb.	807.0 lb.	813.6 lb.	1,389 lb.	— lb.	1,501 lb.	1,188 lb.

¹Interpreted from condition reports.

The amount of wheat remaining on farms July 1 is estimated at 5.1 p.c. of last year's crop, or about 47,756,000 bushels, as compared with 19,261,000 on July 1, 1919, and 31,923,000, the average of stocks on July 1 for the five years 1914-18.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

The "International Crop Report and Agricultural Statistics" for June, 1920, gives a revised statement of the areas sown to cereal crops in the northern hemisphere for the year 1920. Table I gives the data, as compared with 1919 and with the average of the five years 1914-18. Hectares have been converted into acres.

I. Revised Estimate of Areas sown to Cereal Crops in the Northern Hemisphere, 1919 and 1920.

Countries.	1919.	1920.	Per cent of 1919.	Five-year average 1914-18.	Per cent of five-year average.
	000 acres.	000 acres.	p.c.	000 acres.	p.c.
Wheat—					
Belgium.....	329	353	—	—	—
Spain.....	10,378	10,050	96.8	10,087	99.6
France.....	11,316	12,097	106.9	12,464	97.1
Scotland.....	80	67	84.2	68	98.5
Rumania (former King- dom) (a).....	2,965	1,891	63.8	4,690	40.3
Bessarabia (a).....	903	406	44.9	—	—
Bukovina (a).....	—	21	—	—	—
Switzerland.....	130	131	100.6	130	100.4
Canada.....	19,126	16,921	88.5	14,490	116.8
United States (a).....	49,906	34,165	68.5	35,283	96.8
United States (b).....	23,338	19,487	83.5	18,837	103.5
Guatemala.....	21	22	102.3	—	—
British India.....	23,806	29,864	125.4	31,939	93.5
Japan (a).....	1,362	1,325	97.3	1,250	106.1
Algeria.....	2,800	3,116	111.3	3,251	95.8
Morocco.....	1,551	1,489	96.0	—	—
Tunis.....	1,190	1,384	116.3	1,333	103.8
Rye—					
Belgium.....	546	531	107.1	—	—
Spain.....	1,808	1,920	106.2	1,835	104.6
France.....	1,817	2,001	110.1	2,128	94.0
Rumania (former King- dom).....	219	158	72.1	191	83.0
Bessarabia.....	428	129	—	—	—
Bukovina.....	—	39	—	—	—
Switzerland.....	55	52	95.0	58	89.0
Canada.....	753	730	96.9	228	320.4
United States.....	6,963	5,470	78.6	3,918	139.6
Barley—					
Belgium.....	75	80	106.9	—	—
Spain.....	4,254	4,265	100.3	3,859	110.5
France.....	1,340	1,449	108.2	1,593	91.0
Scotland.....	174	185	106.5	165	112.1
Rumania (former King- dom).....	—	32	—	—	—
Bessarabia.....	—	2	—	—	—
Switzerland.....	19	2	—	18	—
Canada.....	2,646	2,575	97.3	2,110	122.0
United States.....	7,420	7,437	100.2	8,229	90.4
Japan.....	2,931	2,691	91.8	3,066	87.8
Algeria.....	2,640	2,679	101.5	2,896	92.5
Morocco.....	1,523	1,507	99.0	1,970	76.5
Tunis.....	977	1,137	116.3	1,101	103.2

(a) Winter Wheat. (b) Spring Wheat.

I. Revised Estimate of Areas sown to Cereal Crops in the Northern Hemisphere, 1919 and 1920—con.

Countries.	1919.	1920.	Per cent of 1919.	Five-year average 1914-18.	Per cent of five-year average.
	000 acres.	000 acres.	p.c.	000 acres.	p.c.
Oats—					
Belgium.....	550	566	102.9	—	—
Spain.....	1,595	1,574	98.7	1,402	112.3
France (I).....	6,815	8,166	119.8	7,748	105.4
Scotland.....	1,111	1,110	99.9	1,035	107.2
Rumania (former King- dom).....	—	34	—	—	—
Bessarabia.....	—	1	—	—	—
Switzerland.....	57	56	99.6	79	71.9
Canada.....	14,952	15,291	102.3	12,117	126.2
United States.....	42,401	41,032	96.8	41,774	98.2
Algeria.....	533	547	102.6	594	92.2
Morocco.....	7	6	82.1	6	88.5
Tunis.....	127	148	116.7	143	103.8
Linseed—					
Belgium.....	48	47	97.9	—	—
British India.....	1,989	3,101	155.9	3,410	90.9
Algeria.....	7	5	66.7	—	—

CROP CONDITIONS IN EUROPEAN COUNTRIES.

In *Germany* the spring season has been very favourable to cereal crops, and has completely repaired the slight damage caused during winter. Conditions during the spring were also favourable in *Bulgaria*. In *Hungary* exceptional heat and drought had a bad effect on the progress of cereal crops and sugar beets. In *Italy* the condition of wheat, rye, barley, oats and corn on June 1 was average; that of the rice crop was good. The condition of the potato crop was average. On May 1 in *Luxemburg* weather conditions were favourable. In *Poland* the condition of winter wheat was average and that of rye was bad. In *Sweden* winter wheat was 17 p.c. above and spring wheat 6 p.c. below the decennial average; rye was 9 p.c. above, barley 3 p.c. above and oats just average. In *Switzerland* winter seedings benefited by favourable conditions in the spring. Dry, mild weather was favourable to spring seeding in Czecho-Slovakia.

STATISTICS OF FARM LIVE STOCK.

Table II gives the numbers of farm live stock in Alsace-Lorraine, Germany and Sweden for the latest dates available, with comparative figures of the previous enumeration:—

II. Numbers of Farm Live Stock in Alsace-Lorraine (1918-19), Germany (1919-20) and Sweden (1918-19).

Description.	Dec. 4, 1918.	Dec. 2, 1919.	Increase (+) or decrease (-)	Increase (+) or decrease (-) per cent
Alsace-Lorraine—				
Horses.....	70,475	83,188	+12,713	+18.0
Cattle.....	393,205	385,207	- 7,998	- 2.0
Sheep.....	37,460	29,839	- 7,621	-20.3
Pigs.....	246,958	291,865	+44,907	+18.2
Goats.....	121,340	107,157	-14,183	-11.7
Geese and ducks.....	179,038	165,113	-13,925	- 7.8
Poultry.....	1,366,292	1,778,444	+412,152	+30.2
Germany—	March, 1919	March, 1920 ²		
Horses ¹	2,378,457	2,382,241	+3,784	+ 0.2
Cattle.....	15,882,164	16,213,454	+331,290	+ 2.1
Sheep.....	5,684,543	6,199,481	+514,938	+ 9.1
Pigs.....	6,755,806	9,323,444	+2,568,138	+38.0
Goats.....	3,610,692	3,689,754	+79,062	+ 2.2
Sweden—	June, 1918.	June, 1919.		
Horses.....	714,822	715,681	+859	+ 0.1
Cattle.....	2,584,159	2,550,828	-33,331	- 1.3
Sheep.....	1,409,473	1,563,654	+154,181	+10.9
Goats.....	133,304	133,150	-154	-0.1
Pigs.....	633,862	716,783	+82,921	+13.1
Poultry.....	4,774,566	4,828,899	+54,333	+ 1.1
Turkeys.....	4,050	4,267	+217	+ 5.4
Geese.....	17,530	21,093	+3,563	+20.3
Ducks.....	14,600	17,089	+ 2,489	+17.0
Honey-bee colonies.....	133,535	126,009	-7,526	- 5.6

¹Prussia only. ²Provisional figures.

In Alsace-Lorraine, horses, swine and poultry have increased substantially, cattle have slightly declined, whilst sheep and goats show a material decrease. In Germany all descriptions show an increase, the largest increase being in the case of swine. In Sweden nearly all descriptions show an increase, except cattle, which, however, have only fallen off by 1.3 p.c.

THE WORLD'S CROPS OF WHEAT AND RYE.

According to a communication received on July 29, there were on April 1, 1920, 385 million bushels of wheat and rye available for shipment from the exporting countries (220 million in North America, 117 million in South America and 48 million in Australia). The importing countries are shown to require between April 1 and the periods of their respective harvests 298 million bushels. The stocks at that date were consequently sufficient not only to supply all requirements up to harvest-time in the northern hemisphere, but also to leave a surplus available in the coming season. According to the figures just quoted, this surplus should be 88 million bushels on August 1, 1920, but it may be even larger, in the probable event of insufficient means of transporting the whole of the 298 million bushels within the limits of the four closing months of the current campaign. In importing countries the generally favourable character of the summer

points to a good harvest in Europe. If the present promise is realized, it may be assumed that the aggregate requirements of the large importers will be appreciably less than in the past year. Amongst exporting countries it is doubtful whether Rumania can contribute anything material towards the world's supply next season, owing to the seriously reduced area sown last autumn. As regards Russia, there is no means of forming a definite opinion. British India has had a larger crop than last year and even an over average one. It therefore seems probable that exports will recommence next season. The United States expect a crop falling short of that of 1919, but above the average of pre-war seasons. There are no official Canadian estimates, but it is stated that the crop is doing well and the yield may be considerably larger than last year's. Taking into account the old crop stocks remaining on hand at the opening of the new season, it may be assumed that the available exportable surplus of wheat and rye from North America during the season of 1920-21 will be greater than the quantity exported in the current season. The outlook for the coming year may therefore be summarized, so far as the present situation indicates, as one which does not justify any serious anxiety, either with respect to the needs of the importers or to the extent of available supplies in the exporting countries.

THE WEATHER DURING JUNE.

The Dominion Meteorological Office reports that the temperature was from average to 3° below in British Columbia, Alberta and Saskatchewan. It was from average to 3° above in Ontario and Quebec, and just about the average in Manitoba and the Maritime Provinces. In British Columbia the precipitation was above the average, except at a few points in the southern portion of the interior. In the western provinces there was an excess in parts of northern Alberta and Saskatchewan; elsewhere there was a deficiency which in most localities was very marked. Ontario had more than the average, except in the Nipissing and Timiskaming districts, where the majority of places reported a light precipitation. In Quebec the rainfall was very deficient, except in a few places, whereas in the Maritime Provinces there was more rain than the normal quantity in some parts and less than the normal in others.

PRICES OF AGRICULTURAL PRODUCE, 1920.

In this issue of the Monthly Bulletin the section devoted to the prices of agricultural produce has been expanded to include a more complete record of all descriptions, this being now rendered possible by the systematic collection of prices undertaken by the recently organized Internal Trade Division of the Dominion Bureau of Statistics, acting in co-operation, for the prices of live stock, with the Markets Intelligence Division of the Live Stock Branch of the Dominion Department of Agriculture. The prices for produce other than grain, now published, include yearly averages in Table VI and monthly

or weekly averages from January to June, 1920, in Tables V, VII, VIII and IX. These tables, it is intended to replace in future issues by others in continuation of the record. The tables are self-explanatory, and the source of the statistics is given for each.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920. SOURCE: Board of Grain Commissioners for Canada.

For Wheat the quotations are Cash Prices with Participation Certificates of the Canadian Wheat Board.

Grain and Grade.	June 5.		June 12.		June 19.		June 26.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
No. 1 hard.....	2 15	—	2 15	—	2 15	—	2 15	—
No. 1 Nor.....	2 15	—	2 15	—	2 15	—	2 15	—
No. 2 Nor.....	2 12	—	2 12	—	2 12	—	2 12	—
No. 3 Nor.....	2 08	—	2 08	—	2 08	—	2 08	—
No. 4 Special.....	2 02	—	2 02	—	2 02	—	2 02	—
No. 5 Special.....	1 91	—	1 91	—	1 91	—	1 91	—
No. 6 Special.....	1 81	—	1 81	—	1 81	—	1 81	—
Feed.....	1 71	—	1 71	—	1 71	—	1 71	—
Oats—								
No. 2 C.W.....	1 17½—1 28½		1 26—1 34		1 32—1 38½		1 26—1 32½	
No. 3 C.W.....	1 15½—1 28½		1 26—1 34		1 32—1 38½		1 26—1 32½	
No. 1 Feed ex.....	1 15½—1 28½		1 26—1 34		1 32—1 38½		1 26—1 32½	
No. 1 Feed.....	1 14½—1 26½		1 25—1 33		1 31½—1 37½		1 25½—1 31½	
Barley—								
No. 3 C.W.....	1 80—1 90½		1 87—1 92½		1 96—1 99		1 97½—	
No. 4 C.W.....	1 60—1 66½		1 62—1 67½		1 66—1 70½		1 59—1 66½	
Rejected.....	1 56—1 62		1 57½—1 62½		1 63—1 66½		1 56½—1 61½	
Feed.....	1 56—1 62		1 57½—1 62½		1 63—1 66½		1 56½—1 61½	
Flax—								
No. 1 N.W.C.....	4 46—4 62		4 26—4 42½		4 12½—4 30½		4 10—4 24	
No. 2 C.W.....	4 42—4 57½		4 22—4 38		4 08½—4 26½		4 06—4 20	
No. 3 C.W.....	3 85—4 05½		3 69—3 86		3 67½—3 73		3 57—3 71½	

II. Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1920.

(SOURCE: Monthly Crop Report of the U. S. Department of Agriculture.)

Grain and Market.	March.		April		May.		June.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red Winter, No. 2—								
St. Louis.....	2 50	—2 68	2 64	—2 93	2 83	—3 12	2 75	—2 99
Chicago.....	2 55	—	2 63	—2 87	2 83	—3 15	2 75	—3 00
New York (f.o.b. afloat).....	2 60	—2 85	2 86	—3 16	3 10	—3 38	3 05	—3 20
Corn, No. 2, mixed—								
St. Louis.....	1 58	—1 66	1 71	—1 78	1 85	—2 13	1 77	—2 00
Corn No. 2—								
Chicago.....	1 50	—1 69	1 66½—1 80		1 87	—2 17	1 76	—2 01½
Oats, No. 2—								
St. Louis.....	0 91	—1 00½	1 01	—1 09	1 03½—1 17		1 07½—1 21	
Chicago.....	0 88	—1 00	0 92½—1 11½		1 00½—1 17½		1 07—1 29	
Rye, No. 2—								
Chicago.....	1 59½—1 83½		1 82½—2 17		1 98	—2 29	2 13	—2 41

III. Range of Prices of Imported Grain and Flour at British Markets, 1920.

SOURCE: For Mark Lane, London, "The Mark Lane Express;" for Liverpool, "Broomhall's Corn Trade News."

MARK LANE.	May 3.		May 10.		May 17.		May 24.		May 31.		
Wheat—	\$	c. •	\$	c.	\$	c.	\$	c.	\$	c.	
Canadian No. 1.....	2	79 ³ / ₄	2	79 ³ / ₄	2	79 ³ / ₄	2	79 ³ / ₄	2	79 ³ / ₄	
Canadian No. 2.....	2	76 ³ / ₄	2	76 ³ / ₄	2	76 ³ / ₄	2	76 ³ / ₄	2	76 ³ / ₄	
American Spring.....	2	75 ³ / ₄	2	75 ³ / ₄	2	76 ³ / ₄	2	76 ³ / ₄	2	76 ³ / ₄	
American hard winter...	2	76 ³ / ₄	2	76 ³ / ₄	2	79 ³ / ₄	2	79 ³ / ₄	2	79 ³ / ₄	
American red winter....	2	73 ³ / ₄	2	73 ³ / ₄	2	73 ³ / ₄	2	73 ³ / ₄	2	73 ³ / ₄	
Australian.....	2	82 ³ / ₄	2	82 ³ / ₄	2	88 ³ / ₄	3	00	3	00	
Argentine.....	2	76 ³ / ₄	2	76 ³ / ₄	2	76 ³ / ₄	2	76 ³ / ₄	2	88 ³ / ₄	
Oats—	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	
Canadian.....	1 42 ¹ / ₂	— 1 47 ¹ / ₂	1 42 ¹ / ₂	— 1 47 ¹ / ₂	1 47 ¹ / ₂	— 1 52 ¹ / ₂	1 52 ¹ / ₂	— 1 57 ¹ / ₂	1 57 ¹ / ₂	— 1 62 ¹ / ₂	
American.....	1 37	— 1 42 ¹ / ₂	1 37	— 1 42 ¹ / ₂	1 42 ¹ / ₂	— 1 47 ¹ / ₂	1 50	— 1 52 ¹ / ₂	1 52 ¹ / ₂	— 1 57 ¹ / ₂	
Argentine.....	1 37	— 1 39 ¹ / ₂	1 37	— 1 39 ¹ / ₂	1 42 ¹ / ₂	— 1 44 ¹ / ₂	1 47 ¹ / ₂	— 1 50	1 52 ¹ / ₂	— 1 55 ¹ / ₂	
Flour—											
Canadian Spring.....	15 57	— 15 94	15 57	— 15 94	15 57	— 15 90	15 57	— 15 90	15 57	— 15 90	
American Spring.....	15 57	— 15 94	15 57	— 15 94	15 57	— 16 18	15 57	— 16 18	15 57	— 16 18	
American Winter.....	15 57	— 15 94	15 57	— 15 94	15 81	— 15 94	15 81	— 15 94	15 81	— 15 94	
Australian.....	15 57	— 15 94	15 57	— 15 94	15 57	— 15 94	15 57	— 15 94	15 57	— 15 94	
LIVERPOOL.				May 4.		May 11.		May 18.		May 25.	
Wheat—	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	
Nor. Man. No. 1.....	3	00	2	93	2	93	2	93	2	93	
Nor. Man. No. 2.....	2	96 ³ / ₄	2	98 ³ / ₄	2	98 ³ / ₄	2	98 ³ / ₄	2	98 ³ / ₄	
Man. No. 3.....	2	93 ³ / ₄	2	93 ³ / ₄	2	95 ³ / ₄	2	95 ³ / ₄	2	95 ³ / ₄	
Red Winter No. 2.....	2	93 ³ / ₄	2	93 ³ / ₄	2	95 ³ / ₄	2	95 ³ / ₄	2	95 ³ / ₄	
Hard winter No. 2.....	2	96 ³ / ₄	2	96 ³ / ₄	2	98 ³ / ₄	2	98 ³ / ₄	2	98 ³ / ₄	
Australian.....	3	03	3	03	3	04 ³ / ₄	3	04 ³ / ₄	3	04 ³ / ₄	
MARK LANE.		June 7.		June 14-28.		LIVERPOOL.		June 1-29.			
Wheat—	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	
Canadian No. 1.....	2	79 ³ / ₄	—	2	79 ³ / ₄	—	Nor. Man. No. 1..	3	01 ³ / ₄		
Canadian No. 2.....	2	76 ³ / ₄	—	2	76 ³ / ₄	—	Nor. Man. No. 2..	2	98 ³ / ₄		
American Spring.....	2	76 ³ / ₄	—	2	76 ³ / ₄	—	Nor. Man. No. 3..	2	95 ³ / ₄		
American hard winter...	2	79 ³ / ₄	—	2	79 ³ / ₄	—	No. 2 red winter..	2	98 ³ / ₄		
American red winter....	2	73 ³ / ₄	—	2	73 ³ / ₄	—	Australian.....	3	04 ³ / ₄		
Australian.....	3	00	—	2	88 ³ / ₄	—					
Argentine.....	2	88 ¹ / ₂	—	2	82 ³ / ₄	—					
Oats—											
Canadian.....	1	62 ¹ / ₂	— 1 65 ¹ / ₂	1	62 ¹ / ₂	— 1 65 ¹ / ₂					
American.....	1	57 ¹ / ₂	— 1 60 ¹ / ₂	1	57 ¹ / ₂	— 1 60 ¹ / ₂					
Argentine.....	1	50	— 1 52 ¹ / ₂	1	50	— 1 52 ¹ / ₂					
Flour—											
Canadian Spring.....	15	82	— 15 94	15	99	—					
American Spring.....	15	82	— 16 06	15	99	—					
American Winter.....	15	82	— 15 94	15	99	—					
Australian.....	15	57	— 15 94	15	99	—					

IV. Average Prices of British Grown Grain, 1920.

SOURCE: "London Gazette," published pursuant to s. 8 of the Corn Returns Act, 1882.

Week ended	Wheat.		Barley.		Oats.	
	per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
May 1.....	72 9	2.212	84 2	2.458	56 6	1.497
" 8.....	72 8	2.210	84 3	2.460	57 7	1.526
" 15.....	72 10	2.215	85 8	2.502	60 10	1.612
" 22.....	72 10	2.215	86 1	2.514	60 1	1.590
" 29.....	72 10	2.215	89 3	2.606	63 0	1.669
Average.....	72 9	2.212	85 11	2.508	59 7	1.579
June 5.....	72 9	2.212	90 8	2.647	63 4	1.678
" 12.....	73 0	2.220	92 7	2.703	63 10	1.692
" 19.....	73 1	2.223	95 6	2.789	65 1	1.725
" 26.....	78 9	2.395	87 2	2.545	64 7	1.711
Average.....	74 5	2.263	91 6	2.671	64 3	1.702

V.—Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1920.

SOURCE: For Montreal, Trade Bulletin; for Toronto, Dealers' quotations; for Winnipeg and U.S. Cities, "The Northwestern Miller," Minneapolis.

Month.	MONTREAL.					TORONTO.					MINNEAPOLIS.					DULUTH.				
	Flour.		Bran.		Shorts.	Standard Flour.		Bran.		Shorts.	Standard Flour.		Bran.		Shorts.	Standard Flour.		Bran.		Shorts.
	Manitoba Standard grade.	Ontario del'd at Montreal.	Per bbl. \$	cts.		Flour.	Per ton. \$	Flour. (Jute bags.)	Per ton. \$		Flour. (Cotton bags.)	Per ton. \$	Flour.	Per ton. \$		Flour.	Per ton. \$	Flour.	Per ton. \$	
1920.	Per bbl. \$	Per bbl. \$	Per ton. \$	cts.	Per ton. \$	Per bbl. \$	cts.	Per bbl. \$	cts.	Per ton. \$	Per bbl. \$	cts.	Per ton. \$	cts.	Per ton. \$	Per bbl. \$	cts.	Per ton. \$	cts.	Per ton. \$
January.....	13 34	9 75	44 70	52 25	52 25	13 25	13 40	45 25	45 25	52 25	13 40	45 25	52 25	45 25	52 25	13 40	45 25	52 25	45 25	52 25
February.....	13 40	10 90	45 25	52 25	52 25	13 25	13 45	45 25	45 25	52 25	13 45	45 25	52 25	45 25	52 25	13 45	45 25	52 25	45 25	52 25
March.....	13 40	10 76	45 25	52 25	52 25	13 25	13 45	45 25	45 25	52 25	13 45	45 25	52 25	45 25	52 25	13 45	45 25	52 25	45 25	52 25
April.....	13 47	10 76	48 87	55 87	60 50	13 40	13 60	51 25	51 25	58 25	13 60	51 25	58 25	51 25	61 25	13 60	51 25	58 25	51 25	61 25
May.....	14 55	11 38	53 50	60 50	61 25	14 85	15 05	54 25	54 25	61 25	15 05	54 25	61 25	54 25	61 25	15 05	54 25	61 25	54 25	61 25
June.....	14 95	13 25	54 25	61 25	61 25	14 85	15 05	54 25	54 25	61 25	15 05	54 25	61 25	54 25	61 25	15 05	54 25	61 25	54 25	61 25

Month.	WINNIPEG.					MINNEAPOLIS.					DULUTH.				
	Flour.		Bran.		Shorts.	Flour.		Bran.		Shorts.	Flour.		Bran.		Shorts.
	Per bbl. \$	Per ton. \$	Per bbl. \$	Per ton. \$		Per bbl. \$	Per ton. \$	Per bbl. \$	Per ton. \$		Per bbl. \$	Per ton. \$	Per bbl. \$	Per ton. \$	
1920.	Per bbl. \$	Per ton. \$	Per bbl. \$	Per ton. \$	Per ton. \$	Per bbl. \$	Per ton. \$	Per bbl. \$	Per ton. \$	Per ton. \$	Per bbl. \$	Per ton. \$	Per bbl. \$	Per ton. \$	Per ton. \$
January.....	12 65	39 00	46 00	46 00	46 00	14 53	41 58½	42 70	44 37	45 10	14 18	41 58½	42 70	44 37	45 10
February.....	12 65	39 00	46 00	46 00	46 00	13 41	42 50	43 37½	47 83	48 50	13 35	42 50	43 37½	47 83	48 50
March.....	12 65	39 00	46 00	46 00	46 00	13 37½	42 50	43 37½	47 83	48 50	13 55	42 50	43 37½	47 83	48 50
April.....	12 76½	43 50	50 50	50 50	50 50	14 55	49 66	50 50	54 87½	54 87½	14 25	49 66	50 50	54 87½	54 87½
May.....	13 64	46 80	53 80	53 80	53 80	15 28	53 00	53 40	57 25	57 60	14 95	53 00	53 40	57 25	57 60
June.....	14 30	48 00	55 00	55 00	55 00	14 02	50 75	52 62½	56 00	56 75	14 15	50 75	52 62½	56 00	56 75

NOTE.—The ton = 2,000 lb. and the barrel = 196 lb.

VII. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	January.	February.	March.	April.	May.	June.
Montreal—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Steers, heavy, finished.....	—	—	—	15-50	—	15-75
Steers, 1,000-1,200 lb., good.....	1-92	12-625	13-54	14-18	15-25	15-9125
Steers, 1,000-1,200 lb., common.....	—	11-215	—	—	—	—
Steers, 700-1,000 lb., good.....	12-25	12-083	12-34	13-62	14-20	14-6875
Steers, 700-1,000 lb., common.....	10-30	10-562	11-00	11-57	12-00	12-8125
Heifers, good.....	11-13	11-25	12-03	13-52	13-50	14-0625
Heifers, fair.....	9-60	9-92	10-34	10-72	11-25	11-72
Heifers, common.....	7-85	8-37	8-00	8-90	9-65	9-125
Cows, good.....	10-35	10-062	11-10	11-58	11-65	11-8125
Cows, common.....	8-00	8-25	8-27	8-62	9-00	9-25
Bulls, good.....	19-75	10-25	10-66	11-86	11-10	11-625
Bulls, common.....	7-55	8-50	8-70	9-02	9-25	9-50
Canners and Cutters.....	5-75	6-00	6-05	6-24	6-35	6-3125
Oxen.....	9-50	9-25	10-61	—	11-25	12-50
Calves, veal.....	15-30	17-75	16-24	14-48	12-10	12-5625
Calves, grass.....	7-57	8-20	7-96	—	—	8-25
Stockers, 450-800 lb., good.....	—	—	—	—	—	—
Stockers, 450-800 lb., fair.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., good.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), select.....	19-12	19-862	20-22	20-93	21-00	20-4375
Hogs (fed and watered), heavies.....	—	—	—	20-75	20-50	19-516
Hogs (fed and watered), lights.....	18-62	19-687	19-93	20-57	20-80	—
Hogs (fed and watered), sows.....	15-52	15-85	16-23	16-71	16-90	16-337
Hogs (fed and watered), stags.....	14-00	—	—	—	—	—
Lambs, good.....	16-51	16-75	17-33	16-29	—	18-1666
Lambs, common.....	15-56	16-06	16-55	15-22	—	—
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	9-49	11-30	12-73	12-59	12-25	10-925
Sheep, common.....	8-81	9-97	11-81	11-56	11-50	9-50
Toronto—						
Steers, heavy, finished.....	13-41	13-33	13-74	14-25	15-15	15-195
Steers, 1,000-1,200 lb., good.....	12-892	12-722	13-13	13-57	14-47	14-85
Steers, 1,000-1,200 lb., common.....	10-69	—	9-59	11-53	12-85	12-64
Steers, 700-1,000 lb., good.....	12-174	11-912	12-33	13-04	13-85	14-84
Steers, 700-1,000 lb., common.....	9-47	8-952	9-56	10-70	11-71	11-8225
Heifers, good.....	12-152	11-987	12-38	12-95	13-83	14-60
Heifers, fair.....	10-19	9-96	10-30	11-02	12-07	13-142
Heifers, common.....	7-93	8-35	8-52	9-29	10-23	10-775
Cows, good.....	10-438	10-07	10-54	10-75	11-56	12-8125
Cows, common.....	8-218	8-082	8-62	8-68	9-66	11-0825
Bulls, good.....	10-42	10-11	10-27	10-55	11-69	12-172
Bulls, common.....	8-19	7-99	8-62	8-91	9-64	10-112
Canners and Cutters.....	5-84	5-852	5-93	6-04	6-09	5-855
Oxen.....	—	—	—	—	—	—
Calves, veal.....	17-518	18-687	19-18	16-45	15-43	15-58
Calves, grass.....	7-22	7-98	8-25	10-00	—	—
Stockers, 450-800 lb., good.....	9-61	9-36	9-90	10-35	11-32	11-557
Stockers, 450-800 lb., fair.....	8-33	7-93	8-86	9-21	9-97	10-015
Feeders, 800-1,100 lb., good.....	10-94	10-64	11-21	11-62	12-55	12-912
Feeders, 800-1,100 lb., fair.....	10-17	—	10-50	10-93	11-81	11-082
Hogs (fed and watered), select.....	18-228	19-035	19-62	20-15	20-23	19-59
Hogs (fed and watered), heavies.....	17-60	18-25	18-32	18-71	19-14	18-617
Hogs (fed and watered), lights.....	16-19	16-95	17-45	18-03	18-14	17-7533
Hogs (fed and watered), sows.....	14-41	15-02	15-43	15-98	16-25	15-425
Hogs (fed and watered), stags.....	11-49	13-50	13-59	13-50	14-22	14-25
Lambs, good.....	18-464	19-657	19-86	18-65	16-77	19-1675
Lambs, common.....	15-75	16-10	15-50	15-72	15-01	17-385
Sheep, heavy.....	—	—	—	—	—	10-25
Sheep, light.....	10-664	11-495	13-23	14-60	14-09	12-18
Sheep, common.....	6-45	6-30	7-07	6-86	7-68	7-535
Winnipeg—						
Steers, heavy, finished.....	11-85	11-88	12-13	13-37	15-01	15-227
Steers, 1,000-1,200 lb., good.....	11-38	11-347	11-53	12-45	14-10	14-495
Steers, 1,000-1,200 lb., common.....	8-77	8-83	9-00	9-00	9-50	10-00
Steers, 700-1,000 lb., good.....	9-652	10-022	10-11	11-46	13-35	13-3975
Steers, 700-1,000 lb., common.....	7-25	7-905	8-73	9-13	—	9-00
Heifers, good.....	10-297	10-27	11-07	11-36	13-40	13-2825
Heifers, fair.....	8-26	8-19	8-93	9-32	10-26	10-29
Heifers, common.....	6-24	6-25	6-75	7-25	8-00	7-56
Cows, good.....	9-354	9-037	9-44	10-24	11-43	11-445
Cows, common.....	7-226	7-18	7-44	7-95	8-68	8-6875
Bulls, good.....	7-43	7-84	7-15	8-21	9-42	9-282
Bulls, common.....	5-91	6-07	6-19	6-37	6-90	6-778
Canners and Cutters.....	5-264	5-155	5-09	4-54	4-41	4-3725
Oxen.....	7-71	6-71	8-32	6-00	—	8-25
Calves, veal.....	8-324	10-612	11-01	12-59	13-21	11-6475

VII. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

Classification.	January.	February.	March.	April.	May.	June.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Winnipeg—con.						
Calves, grass.....	7-67	8-32	9-29	8-63	8-63	8-91
Stockers, 450-800 lb., good.....	6-25	6-32	7-39	7-42	7-91	7-145
Stockers, 450-800 lb., fair.....	10-22	10-43	10-60	10-63	11-94	10-305
Feeders, 800-1,100 lb., good.....	8-79	8-73	9-69	9-69	9-80	8-852
Feeders, 800-1,100 lb., fair.....	17-066	18-797	20-70	20-03	21-61	19-395
Hogs (fed and watered) selects.....	15-03	16-65	18-48	17-91	19-65	17-252
Hogs (fed and watered), heavies.....	15-068	15-715	19-00	17-72	19-56	17-1125
Hogs (fed and watered), lights.....	13-18	15-367	15-56	16-00	17-92	15-367
Hogs (fed and watered), sows.....	12-00	-	12-50	12-46	15-32	13-245
Hogs (fed and watered), stags.....	14-17	14-375	15-03	15-00	15-65	15-995
Lambs, good.....	10-00	-	-	-	-	-
Lambs, common.....	-	11-50	-	-	-	-
Sheep, heavy.....	10-135	12-25	12-01	12-00	12-20	12-6075
Sheep, light.....	6-00	6-00	8-00	-	8-00	7-88
Sheep, common.....	-	-	-	-	-	-
Calgary—						
Steers, heavy, finished.....	11-87	10-92	12-08	12-35	14-63	14-083
Steers, 1,000-1,200 lb., good.....	10-88	11-00	11-53	12-02	13-72	13-00
Steers, 1,000-1,200 lb., common.....	9-58	9-67	9-90	10-00	10-76	12-85
Steers, 700-1,000 lb., good.....	9-95	9-75	10-00	10-00	13-30	12-8333
Steers, 700-1,000 lb., common.....	9-066	9-00	9-25	9-25	10-35	-
Heifers, good.....	9-287	9-75	10-34	11-00	13-50	13-25
Heifers, fair.....	8-37	9-08	9-63	10-10	-	-
Heifers, common.....	7-29	7-75	8-67	-	-	-
Cows, good.....	9-13	9-312	10-13	10-48	13-06	12-0625
Cows, common.....	7-49	7-762	7-86	7-92	9-57	8-35
Bulls, good.....	6-79	7-44	7-79	8-12	9-50	-
Bulls, common.....	5-55	6-50	6-75	7-14	-	5-50
Canners and Cutters.....	4-59	4-50	4-21	4-00	-	-
Oxen.....	-	-	-	9-10	-	-
Calves, veal.....	8-31	8-875	9-50	8-43	11-95	13-50
Calves, grass.....	-	-	-	-	-	-
Stockers, 450-800 lb., good.....	7-12	7-75	8-11	8-50	9-09	9-187
Stockers, 450-800 lb., fair.....	6-30	6-94	6-89	7-50	8-60	8-037
Feeders, 800-1,100 lb., good.....	8-99	9-52	9-67	10-00	10-48	10-525
Feeders, 800-1,100 lb., fair.....	8-31	8-50	8-93	9-00	-	9-50
Hogs (fed and watered), select.....	16-79	20-187	20-22	20-49	21-52	19-525
Hogs (fed and watered), heavies.....	16-17	17-50	19-00	19-50	-	19-25
Hogs (fed and watered), lights.....	16-05	18-975	19-25	19-41	20-39	19-7125
Hogs (fed and watered), sows.....	14-05	17-19	17-45	17-47	18-40	16-275
Hogs (fed and watered), stags.....	11-00	14-50	14-00	-	-	-
Lambs, good.....	13-125	16-166	-	-	9-00	-
Lambs, common.....	-	-	-	-	-	-
Sheep, heavy.....	-	11-00	-	-	-	-
Sheep, light.....	10-20	11-333	13-72	17-30	14-60	13-50
Sheep, common.....	9-12	10-50	-	-	-	-
Edmonton—						
Steers, heavy, finished.....	12-00	11-75	12-62	13-45	14-24	-
Steers, 1,000-1,200 lb., good.....	10-33	11-187	11-72	11-97	14-08	12-8125
Steers, 1,000-1,200 lb., common.....	8-62	9-12	10-06	10-31	11-43	11-125
Steers, 700-1,000 lb., good.....	8-95	9-50	10-51	10-71	12-00	11-75
Steers, 700-1,000 lb., common.....	7-40	8-50	9-29	9-53	10-68	10-1666
Heifers, good.....	8-25	9-50	10-78	10-68	12-10	12-25
Heifers, fair.....	7-94	9-25	9-57	10-34	11-03	10-4
Heifers, common.....	6-00	8-25	8-45	9-20	10-00	9-375
Cows, good.....	8-55	9-062	10-28	10-42	12-48	11-50
Cows, common.....	6-85	7-00	8-07	8-68	9-76	9-1666
Bulls, good.....	6-00	7-17	7-75	7-75	9-00	7-833
Bulls, common.....	5-00	6-12	6-75	6-42	7-25	7-125
Canners and Cutters.....	4-166	4-25	4-60	5-00	5-50	-
Oxen.....	-	-	9-30	8-44	-	-
Calves, veal.....	7-90	9-25	11-38	11-84	14-47	14-00
Calves, grass.....	-	-	-	-	-	-
Stockers, 450-800 lb., good.....	7-15	7-81	8-06	8-14	9-28	8-375
Stockers, 450-800 lb., fair.....	6-10	7-00	7-12	7-57	8-45	7-437
Feeders, 800-1,100 lb., good.....	8-60	9-00	-	-	10-93	10-375
Feeders, 800-1,100 lb., fair.....	-	-	-	-	-	-
Hogs (fed and watered), selects.....	16-81	18-912	19-89	19-94	21-20	19-3125
Hogs (fed and watered), heavies.....	15-27	18-50	18-46	18-99	20-25	18-312
Hogs (fed and watered), lights.....	14-71	15-912	16-62	16-83	18-15	17-0625
Hogs (fed and watered), sows.....	13-52	15-91	16-80	16-85	18-20	17-062
Hogs (fed and watered), stags.....	12-75	14-50	15-88	15-29	17-27	15-375
Lambs, good.....	11-25	13-50	13-81	17-00	-	-
Lambs, common.....	-	11-00	13-53	-	-	10-00
Sheep, heavy.....	8-75	-	-	-	-	-
Sheep, light.....	8-50	9-50	10-00	-	-	13-00
Sheep, common.....	7-75	8-50	8-83	-	-	-

IX. Wholesale Prices per lb. of Produce as on the 15th of Each Month, at Principal Markets, 1920.
 SOURCE: Dealers' quotations.

Description.	January.	February.	March.	April.	May.	June.
	cents.	cents.	cents.	cents.	cents.	cents.
Montreal—						
Hams, smoked—light, under 20 lb....	34	38	37	39-41	42-43	45
Bacon, light, under 12 lb.....	40	42	42	36-43	44-47	49
Barrelled Mess Pork.....	26	26	26	25	25	24
Beef, carcass fresh (No. 1) Butcher (good steers and heifers).....	24½	23½	23½	22½	26½	27-27½
Barrelled Plate Beef.....	16½	16½	16½	16½	15	15
Lambs, yearlings.....	24-32	24-29	24-29	—	—	—
Sheep, good.....	20-22	20-22	20-22	21-22	23-24	27-29
Lard, tierces.....	32	33½	33	31½	30½	28½
Butter, creamery prints.....	69	64	61	63	58	58
Butter, creamery solids.....	68	63	60	62	57	57
Butter, Dairy prints.....	57	58	58	58	55	57
Eggs, fresh, select.....	—	75	74	52	55	—
Cheese, large, coloured, new.....	31	31	31	28	—	—
Toronto—						
Hams, smoked, light, under 20 lb....	37	38	39	41	43	40
Bacon, light, under 12 lb.....	40	43	43	45	47	48-49
Barrelled Mess Pork.....	25	25½	25½	25½	27	27
Beef, carcass, fresh (No. 1) Butcher (good steers and heifers).....	25	23	22	24	25	26
Barrelled Plate Beef.....	17½	17½	17½	17½	18½	18½
Lambs, yearlings.....	30-32	30-32	32-34	—	—	32-34
Sheep, good.....	16-24	16-24	16-27	16-27	30	—
Lard, tierces.....	31½	31½	29½	29	27½	29
Butter, creamery prints.....	68	68	65	66	64	57
Butter, creamery, solids No. 1.....	67½	67½	64½	65½	63½	56½
Butter, dairy prints.....	58	58	57	50	50	50
Eggs, fresh, specials.....	67	67	69	55	60	57
Cheese, large, coloured, new.....	31	31	29	29	33	32½
Winnipeg—						
Hams, smoked, light, under 20 lb....	31½-35½	38-40	37-39½	44½-46½	39½-41½	39-40½
Bacon, light, under 12 lb.....	39½-41	45½	44½	49	46½	50
Barrelled Mess Pork.....	22½	22½	22½	25½	24½	25½
Beef, carcass, fresh (No. 1) Butcher (good steers and heifers).....	18-21½	15½-19½	17-20½	23-23½	20½-20½	28
Barrelled Plate Beef.....	18	18	18	—	—	—
Lard tierces.....	—	—	31	30	30½	28¾
Butter, creamery prints.....	69	65	66	70	70	59
Butter, creamery solids.....	68	64	65	69	69	58
Butter, dairy prints.....	62	—	—	59	—	50
Eggs, fresh.....	71	—	67	50	52	48
Vancouver—						
Hams, smoked, light, under 20 lb....	33½-37	38-39	42-43	45-46	48-49	48-49
Bacon, light, under 12 lb.....	46	47	48	47	50	50
Barrelled Mess Pork.....	25	26	27	—	30	30
Beef carcass, fresh (No. 1) Butcher, (good steers and heifers).....	19	21	22-23	24-25	25-26	27
Barrelled Plate Beef.....	15	16½	16½	17	18	18
Sheep, good.....	26	32	36	36	35	28
Lard, tierces.....	32	34	34	30	29½	29¾
Butter, creamery prints.....	73	71	69	74	69	61
Butter, creamery solids.....	71	70	68	73	68	60
Butter, dairy prints.....	—	—	42	42	52	51
Butter, dairy solids.....	—	—	41	41	51	51
Eggs, fresh, select.....	71	69	52	49	55	56
Cheese, large, new.....	33½	32	31½	31	33	33

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1920

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DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. CHIEF, DIVISION OF AGRICULTURAL
STATISTICS: ERNEST H. GODFREY, F.S.S. DOMINION BUREAU OF STATISTICS, OTTAWA,
CANADA.

FIELD CROPS OF CANADA.

Report for the month ended July 31, 1920.

The Dominion Bureau of Statistics issued to-day a preliminary estimate of the yields of fall wheat, hay and clover and alfalfa, as well as a report on the condition of other field crops at the end of July, expressed in percentage of the decennial average 1910-19, and compiled from the returns of crop correspondents. A forecast of the harvest from all the principal field crops of Canada, derived from their condition on July 31, also forms part of the report.

FALL WHEAT AND HAY AND CLOVER.

The preliminary estimate of the yield per acre of fall wheat for Canada is $23\frac{1}{4}$ bushels, as compared with $23\frac{3}{4}$ bushels last year and with $22\frac{1}{2}$ bushels, the decennial average for the period 1910-19. The yield per acre is therefore $\frac{3}{4}$ of a bushel over average. The harvested area this year is 740,300 acres, as compared with 672,793 acres last year, and the total yield, in round numbers, is 17 million bushels, as against 16 million bushels last year. In Ontario the total yield for 1920 is 15,831,000 bushels from 688,300 acres, an average yield per acre of 23 bushels, as compared with 15,052,000 bushels from 619,494 acres, and an average per acre of 24.30 bushels last year. In Alberta the yield this year is 935,000 bushels, as against 640,000 bushels last year, the yield per acre being 24.60 bushels as against $15\frac{3}{4}$ bushels. In British Columbia the yield is 357,000 bushels from 14,000 acres, as compared with 314,000 bushels from 12,699 acres last year, the respective yields per acre being 25.50 and 24.75.

The total yield of hay and clover in Canada is estimated at 12,853,900 tons from 10,409,150 acres, an average per acre of 1.25 ton, as compared with last year's record total of 16,348,000 tons. Of alfalfa the total estimate is 388,700 tons for the first cutting, as compared with last year's final total of 494,200 tons.

CONDITION OF OTHER FIELD CROPS.

For spring wheat the condition at the end of July has fallen by 8 points as compared with a month ago, the figure now being 92 p.c. of the decennial average, as against 100, or just average, a month ago. The deterioration has been caused by continued dry, hot weather during the earlier part of July in Saskatchewan where more

than half the spring wheat crop is grown. In many districts, however, good rains fell about July 22 or 23, just in time to save a large proportion of the crops. The good effect of these rains should be reflected in the next report. In Saskatchewan the condition both for wheat and oats is 89, as compared with 100 last month and 73 at the end of July 1919. In Manitoba the condition for spring wheat is 94, as against 103 last month and 92 on July 31, 1919, oats being 92, as against 102 in June and 92 in July, 1919. In Alberta spring wheat and oats are 98, as against 100 for wheat and 98 for oats last month and 70 for both crops in July last year. In the other provinces the condition of wheat and oats is as follows: Prince Edward Island: Wheat 102; oats 94; Nova Scotia: Wheat 96, oats 97; New Brunswick: wheat and oats 99; Quebec: Wheat 102, oats 105; Ontario: Spring wheat 95, oats 105; British Columbia: Spring wheat 95, oats 96. For all Canada the condition of other crops in percentages of the decennial average is as follows, the figures for last month and for July 31, 1919, being given in brackets: Barley 95 (98 & 85); rye 95 (98 & 88); peas 102 (96 & 92); beans 103 (95 in 1919); buckwheat 101 (94 in 1919); mixed grains 105 (99 & 89); flaxseed 93 (74 in 1919); corn for husking 95 (86 in 1919); potatoes 104 (98 & 88); turnips, etc., 95 (88 in 1919); fodder corn 86 (93 in 1919); pasture 96 (94 & 93).

FORECAST OF TOTAL YIELDS.

The figures expressing condition, including the preliminary estimate of fall wheat, indicate a total yield for Canada of 262,338,000 bushels of wheat, as compared with the final estimate last year of 193,260,400 bushels, 496,966,400 bushels of oats, as compared with 394,387,000 bushels, 63,438,500 bushels of barley, as compared with 56,389,400 bushels and 10,507,700 bushels of flaxseed, as compared with 5,472,800 bushels. For the three Prairie Provinces the forecast is for wheat 238,617,800 bushels (165,544,300); oats 313,820,500 bushels (235,580,000); barley, 40,337,000 bushels (36,682,400) and flaxseed 10,190,000 bushels (5,232,300). For Manitoba the yields in bushels are: Wheat 43,663,800 (40,975,300); oats 59,440,500 (57,698,000); barley 19,462,500 (17,149,000); flaxseed 620,000 (520,300). In Saskatchewan they are: Wheat 134,520,000 (89,994,000); oats 151,217,000 (112,157,000); barley 10,320,000 (8,971,000); flaxseed 8,772,000 (4,490,000). In Alberta they are: Wheat 60,434,000 (34,575,000); oats 103,163,000 (65,725,000); barley 10,554,500 (10,562,000); flaxseed 798,000 (222,000). The figures within brackets represent the finally estimated yields of 1919.

Dominion Bureau of Statistics
Ottawa, August 12, 1920.

ERNEST H. GODFREY,
Chief, Division of Agricultural Statistics.

I.—Area and Preliminary Estimate of the Yield of Fall Wheat in 1920, as compared with the Final Estimate of 1919.

Provinces.	1919.	1920.	1919.	1920.	1919.	1920.
	acres.	acres.	bush per acre.	bush per acre.	bush.	bush.
Ontario.....	619,494	688,300	24.30	23.00	15,052,000	15,831,000
Alberta.....	40,600	38,000	15.75	24.60	640,000	935,000
British Columbia.....	12,699	14,000	24.75	25.50	314,000	357,000
Canada.....	672,793	740,300	23.75	23.25	16,006,000	17,123,000

II.—Area and Preliminary Estimate of the Yield of Hay and Clover and Alfalfa in 1920, as compared with the Final Estimate of 1919.

Provinces.	1919.	1920.	1919.	1920.	1919.	1920.
	acres.	acres.	tons per acre.	tons per acre.	tons.	tons.
Canada—						
Hay and clover.....	10,595,383	10,409,150	1.55	1.25	16,348,000	12,853,900
Alfalfa.....	226,869	229,300	2.20	1.70	494,200	388,700
P. E. Island—						
Hay and clover.....	237,883	232,900	1.80	1.50	428,000	349,400
Nova Scotia—						
Hay and clover.....	678,357	672,000	2.10	1.60	1,425,000	1,075,000
New Brunswick—						
Hay and clover.....	786,175	770,500	1.40	1.15	1,111,000	886,000
Quebec—						
Hay and clover.....	4,299,360	4,299,400	1.50	1.20	6,449,000	5,159,000
Alfalfa.....	28,488	28,200	2.35	2.00	67,000	56,400
Ontario—						
Hay and clover.....	3,508,266	3,340,350	1.59	1.15	5,589,000	3,879,500
Alfalfa.....	146,790	145,900	2.14	1.50	314,400	222,250
Manitoba—						
Hay and clover.....	260,378	263,000	1.50	1.35	401,400	355,000
Alfalfa.....	5,181	5,000	2.20	1.65	11,400	8,300
Saskatchewan—						
Hay and clover.....	265,417	263,000	1.05	1.30	279,000	342,000
Alfalfa.....	11,526	14,500	1.60	2.00	18,400	29,000
Alberta—						
Hay and clover.....	433,296	438,000	1.10	1.25	476,600	548,000
Alfalfa.....	21,553	22,000	2.00	1.75	43,000	38,500
British Columbia—						
Hay and clover.....	126,251	130,000	1.50	2.00	189,000	260,000
Alfalfa.....	13,331	13,700	3.00	2.50	40,000	34,250

III.—Condition of Field Crops on July 31, 1920, as compared with May 31 and June 30, 1920, and with July 31, 1917, 1918 and 1919.

NOTE.—100 = Average yield per acre 1910-19.

Field Crops.	July 31, 1917.	July 31, 1918.	July 31, 1919.	May 31, 1920.	June 30, 1920.	July 31, 1920.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Canada—						
Spring wheat.....	94	77	77	98	100	92
Oats.....	90	85	81	98	100	96
Barley.....	93	86	85	98	98	95
Rye.....	95	83	88	96	98	95
Peas.....	105	101	92	98	96	102
Beans.....	89	95	95	—	—	103
Buckwheat.....	104	93	94	—	—	101
Mixed grains.....	101	101	89	101	99	105
Flax.....	107	71	74	—	—	93
Corn for husking.....	95	86	89	—	—	95
Potatoes.....	98	95	88	—	98	104
Turnips.....	107	—	—	—	—	—
Mangolds, etc.....	102	96	88	—	—	95
Corn for fodder.....	93	85	93	—	—	86
Sugar beets.....	106	92	84	—	—	—
Pasture.....	100	92	93	94	94	96
P. E. Island—						
Spring wheat.....	95	101	103	100	100	102
Oats.....	102	99	103	100	98	94
Barley.....	101	98	103	100	99	100
Peas.....	108	92	100	101	97	98
Buckwheat.....	104	94	98	—	—	95
Mixed grains.....	101	102	103	102	98	101
Potatoes.....	104	93	101	—	105	104
Turnips, mangolds, etc..	101	95	100	—	—	97
Corn for fodder.....	100	91	98	—	—	96
Pasture.....	100	99	104	101	94	94
Nova Scotia—						
Spring wheat.....	100	104	101	97	96	96
Oats.....	101	105	101	96	95	97
Barley.....	103	101	100	96	97	97
Rye.....	105	99	101	83	98	100
Peas.....	101	100	100	95	103	98
Beans.....	111	84	100	—	—	97
Buckwheat.....	102	94	98	—	—	96
Mixed grains.....	101	100	101	98	96	97
Potatoes.....	107	101	101	—	100	101
Turnips, mangolds, etc.	105	98	97	—	—	96
Corn for fodder.....	110	93	94	—	—	98
Pasture.....	103	94	105	96	88	93
New Brunswick—						
Spring wheat.....	91	105	96	95	96	99
Oats.....	91	103	98	97	95	99
Barley.....	92	98	96	97	97	98
Rye.....	—	—	100	—	100	100
Peas.....	107	100	95	95	96	100
Beans.....	111	91	99	—	—	95
Buckwheat.....	102	99	99	—	—	100
Mixed grains.....	100	99	97	95	97	99
Potatoes.....	104	96	99	—	98	95
Turnips, mangolds, etc.	104	97	97	—	—	94
Corn for fodder.....	90	86	97	—	—	94
Pasture.....	105	102	95	87	85	89
Quebec—						
Spring wheat.....	102	106	98	100	99	102
Oats.....	95	106	102	103	101	105
Barley.....	97	104	98	101	100	103
Rye.....	102	101	98	98	96	97

III.—Condition of Field Crops on July 31, 1920, as compared with May 31 and June 30, 1920, and with July 31, 1917, 1918 and 1919—con.

NOTE.—100=Average yield per acre 1910-19.

Field Crops.	July 31, 1917.	July 31, 1918.	July 31, 1919.	May 31, 1920.	June 30, 1920.	July 31, 1920.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Quebec—con.						
Peas.....	102	104	97	101	99	103
Beans.....	68	94	97	—	—	101
Buckwheat.....	101	98	96	—	—	102
Mixed grains.....	98	107	101	100	99	105
Flax.....	86	100	96	—	—	99
Corn for husking.....	88	101	99	—	—	100
Potatoes.....	101	104	99	—	101	105
Turnips, mangolds, etc.	115	101	98	—	—	99
Corn for fodder.....	98	92	105	—	—	98
Pasture.....	120	98	99	96	91	97
Ontario						
Spring wheat.....	111	118	85	98	95	95
Oats.....	112	102	80	99	101	105
Barley.....	112	103	80	98	98	101
Rye.....	102	85	89	95	97	98
Peas.....	109	100	87	99	95	100
Beans.....	94	96	92	—	—	101
Buckwheat.....	104	85	90	—	—	94
Mixed grains.....	111	102	84	101	99	105
Flax.....	107	97	96	—	—	100
Corn for husking.....	81	77	87	—	—	97
Potatoes.....	109	96	84	—	100	104
Turnips, mangolds, etc.	114	95	80	—	—	98
Corn for fodder.....	90	84	91	—	—	97
Sugar beets.....	106	92	84	—	—	99
Pasture.....	126	92	89	91	93	98
Manitoba						
Spring wheat.....	85	85	92	100	103	94
Oats.....	70	86	92	99	102	92
Barley.....	74	89	93	98	99	92
Rye.....	84	84	94	97	98	94
Mixed grains.....	118	99	100	102	101	98
Flax.....	78	92	92	—	—	93
Potatoes.....	97	98	95	—	100	96
Turnips, mangolds, etc.	97	91	95	—	—	95
Corn for fodder.....	83	87	100	—	—	95
Pasture.....	70	83	98	101	105	93
Saskatchewan						
Spring wheat.....	75	75	73	98	100	89
Oats.....	66	75	73	98	100	89
Barley.....	70	78	79	99	99	91
Rye.....	80	79	77	95	99	98
Peas.....	101	84	75	98	96	108
Beans.....	—	—	100	—	—	100
Mixed grains.....	71	89	92	98	104	96
Flax.....	69	73	72	—	—	91
Potatoes.....	85	80	86	—	96	98
Turnips, mangolds, etc.	79	80	76	—	—	101
Corn for fodder.....	75	70	86	—	—	103
Pasture.....	69	91	77	98	106	88
Alberta						
Spring wheat.....	75	69	70	91	99	98
Oats.....	69	68	70	90	98	98
Barley.....	70	70	76	92	96	99
Rye.....	90	77	85	94	97	103
Peas.....	67	81	80	—	100	104
Beans.....	—	—	95	—	—	100
Mixed grains.....	66	99	97	107	94	100

III.—Condition of Field Crops on July 31, 1920, as compared with May 31 and June 30, 1920, and with July 31, 1917, 1918 and 1919—concluded.

NOTE.—100=Average yield per acre 1910-19.

Field Crops.	July 31, 1917.	July 31, 1918.	July 31, 1919.	May 31, 1920.	June 30, 1920.	July 31, 1920.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Alberta—con.						
Flax.....	65	59	65	—	—	104
Potatoes.....	77	71	87	—	97	102
Turnips, mangolds, etc.	78	82	82	—	—	98
Corn for fodder.....	93	52	56	—	—	107
Pasture.....	79	70	75	97	111	106
British Columbia—						
Spring wheat.....	92	87	76	95	100	95
Oats.....	92	89	89	94	101	96
Barley.....	73	89	84	93	99	95
Rye.....	—	—	70	97	100	95
Peas.....	97	90	89	100	101	101
Beans.....	—	—	88	—	—	98
Mixed grains.....	100	95	88	100	99	103
Potatoes.....	94	84	85	—	96	92
Turnips, mangolds, etc.	96	90	86	—	—	87
Corn for fodder.....	—	100	86	—	—	97
Pasture.....	85	83	84	91	92	98

IV.—Harvest Forecast as indicated by Condition of Field Crops on July 31, 1920, and as compared with 1919.

NOTE.—For Condition, 100=Average Yield per Acre, 1910-19.

Field Crops.	Average Yield per Acre, 1910-19.	Condition July 31, 1920.	Indicated Yield per Acre, 1920.	Areas Sown, 1920.	Yield 1919 (Final Estimate)	Forecast of Yield, 1920
	Bush.	p.c.	Bush.	000 acres.	000 bush.	000 bush.
Canada—						
Fall wheat ¹	22.50	—	23.25 ¹	740.3	16,006	17,123 ¹
Spring wheat.....	16.50	92	15.25	16,446	177,254	250,215
Allwheat.....	16.75	—	15.50	17,186.3	193,260	267,338
Oats.....	33.25	96	32.00	15,555	394,387	496,966
Barley.....	25.75	95	24.50	2,588	56,389	63,439
Rye.....	16.00	95	15.25	729.5	10,207	11,065
Peas.....	15.75	102	16.00	222	3,406	3,557
Beans.....	16.25	103	16.75	76	1,389	1,278
Buckwheat.....	23.00	101	23.25	423	10,551	9,799
Mixed grains.....	33.25	105	34.75	909	27,852	31,627
Flax.....	9.40	93	8.75	1,204	5,473	10,508
Corn, husking.....	53.75	95	51.00	268	16,941	13,702
Potatoes.....	146.00	104	151.75	819	125,575	124,312
Turnips, etc.....	352.25	95	333.00	304	112,289	101,220
Hay and clover ¹	1.50	—	1.25 ¹	10,409	16,348	12,854 ¹
Alfalfa ¹	2.40	—	1.70 ¹	229	494	389 ¹

IV.—Harvest Forecast as Indicated by Condition of Field Crops on July 31, 1920, and as compared with 1919—con.

NOTE—For Condition, 100 = Average Yield per Acre, 1910-19.

Field Crops.	Average Yield per Acre, 1910-19.	Condition July 31, 1920.	Indicated Yield per Acre, 1920.	Areas Sown 1920.	Yield 1919 (Final Estimate)	Forecast of Yield, 1920.
	bush.	p.c.	bush.	000 acres.	000 bush.	000 bush.
Canada—Con.						
Corn, fodder.....	8.85	98	8.60	527	4,943	4,500
Sugar beets.....	9.10	99	9.00	26	240	233
P.E. Island—						
Spring Wheat.....	18.75	102	19.25	36	625	693
Oats.....	34.75	94	32.75	174	6,038	5,704
Barley.....	28.00	100	28.00	5.5	164	154
Peas.....	18.50	98	18.25	0.5	8	8.6
Buckwheat.....	26.00	95	24.75	4	88	102
Mixed grains.....	41.75	101	42.25	19	843	811
Potatoes.....	171.75	104	178.50	39	4,529	6,926
Turnips, etc.....	483.50	97	459.00	12.4	6,396	5,669
	tons		tons		tons	tons
Hay and clover ¹	1.55	—	1.50 ¹	233	428	349 ¹
Corn, fodder.....	9.55	96	9.15	400.5	6	4.5
Nova Scotia—						
Spring wheat.....	20.00	96	19.25	27	564	524
Oats.....	32.50	97	31.50	162	5,718	5,101
Barley.....	28.25	97	27.50	14	434	374
Rye.....	20.25	100	20.25	1	31	20
Peas.....	20.25	98	19.75	1.9	38	37
Beans.....	16.50	97	16.00	6.6	87	106
Buckwheat.....	23.75	96	22.75	17	439	380
Mixed grains.....	32.00	97	31.00	8.6	218	267
Potatoes.....	183.00	101	184.75	64	9,992	11,824
Turnips, etc.....	426.50	96	409.50	29.7	16,289	12,162
	tons		tons		tons	tons
Hay and clover ¹	1.70	—	1.60 ¹	672	1,425	1,075 ¹
Corn fodder.....	8.80	98	8.50	2.8	28	24
New Brunswick—						
Spring wheat.....	18.00	99	17.75	33	623	587
Oats.....	29.25	99	29.00	306	9,261	8,860
Barley.....	25.75	98	25.25	10.4	285	263
Rye.....	20.25	100	20.25	0.4	7	7
Peas.....	16.00	100	16.00	4.4	69	70
Beans.....	16.50	95	15.75	6.2	106	98
Buckwheat.....	23.75	100	23.75	73	1,871	1,734
Mixed grains.....	31.50	99	31.25	5.3	179	166
Potatoes.....	176.25	95	174.50	78	10,790	13,611
Turnips, etc.....	346.00	94	325.25	23.6	8,890	7,676
	tons		tons		tons	tons
Hay and clover ¹	1.40	—	1.15 ¹	771	1,111	886 ¹
Corn, fodder.....	5.20	94	5.00	5.8	30	29
Quebec—						
Spring wheat.....	16.50	102	16.75	246	4,206	4,120
Oats.....	26.75	105	28.00	2,205	57,275	61,740
Barley.....	23.00	103	23.75	230	5,344	5,467
Rye.....	15.50	97	15.00	32.5	578	488
Peas.....	15.00	103	15.50	79	1,225	1,228

IV.—Harvest Forecast as indicated by Condition of Field Crops on July 31, 1920, and as compared with 1919—con.

NOTE.—For Condition, 100=Average Yield per acre, 1910-19.

Field Crops.	Average Yield per Acre, 1910-19.	Condition July 31, 1920.	Indicated Yield per Acre, 1920.	Areas Sown 1920.	Yield 1919 (Final Estimate)	Forecast of Yield, 1920.
	bush.	p.c.	bush.	100 acres.	100 bush.	100 bush.
Quebec—Con.						
Beans.....	17.25	101	17.50	40	853	700
Buckwheat.....	25.75	102	26.25	167	4,081	4,384
Mixed grains.....	26.00	105	27.25	158	4,256	4,295
Flax.....	10.50	99	10.50	11.2	111	118
Corn, husking.....	28.50	100	28.50	42.3	1,788	1,206
Potatoes.....	144.75	105	152.00	319	57,280	48,487
Turnips, etc.....	288.25	99	285.25	85	27,780	24,246
	tons		tons		tons	tons
Hay and clover ¹	1.50	—	1.20 ¹	4,299	6,449	5,159
Alfalfa ¹	2.40	—	2.00 ¹	28.2	67	56 ¹
Corn, fodder.....	5.95	98	5.75	73	611	422
Ontario—						
Fall wheat ¹	22.75	—	23.00 ¹	688	15,052	15,831 ¹
Spring wheat.....	19.00	95	18.00	338	5,646	6,088
All wheat.....	22.25	—	21.25	1,026	20,698	21,919
Oats.....	34.75	105	36.50	2,741	78,388	100,037
Barley.....	29.50	101	29.75	555	13,134	16,508
Rye.....	17.00	98	16.75	133	2,219	2,229
Peas.....	15.75	100	15.75	123	1,817	1,932
Beans.....	15.50	101	15.75	19.4	289	306
Buckwheat.....	21.00	94	19.75	162	4,072	3,199
Mixed grains.....	35.50	105	37.25	639	19,736	23,810
Flax.....	13.25	100	13.25	15	130	200
Corn, husking.....	57.00	97	55.25	226	15,153	12,496
Potatoes.....	114.75	104	119.25	155	15,145	18,424
Turnips, etc.....	368.00	98	360.75	114	42,756	41,036
	tons		tons		tons	tons
Hay and clover ¹	1.45	—	1.15 ¹	3,340	5,589	3,880 ¹
Alfalfa ¹	2.40	—	1.50	146 ¹	314	222 ¹
Corn, fodder.....	9.55	97	9.25	417	4,014	3,854
Sugar beets.....	9.10	99	9.00	26	240	233
	bush.		bush.		bush.	bush.
Manitoba—						
Spring wheat.....	17.25	94	16.25	2,687	40,975	43,664
Oats.....	34.25	92	31.50	1,887	57,698	59,441
Barley.....	24.50	92	22.50	865	17,149	19,463
Rye.....	15.50	94	14.50	268	4,089	3,880
Peas.....	19.00	94	17.75	5.7	81.4	101
Mixed grains.....	27.25	98	26.75	28.8	759	770
Flax.....	10.75	93	10.00	62	520	620
Potatoes.....	150.00	96	144.00	40.9	5,288	5,890
Turnips, etc.....	249.25	95	232.75	5.8	1,113	1,350
	tons		tons		tons	tons
Hay and clover ¹	1.40	—	1.35 ¹	263	401	355
Alfalfa ¹	2.25	—	1.65 ¹	5	11.4	8.3
Corn, fodder.....	5.75	95	5.50	16.5	115	91
Saskatchewan—						
	bush.		bush.		bush.	bush.
Spring wheat.....	16.00	89	14.25	9,440	89,994	134,520
Oats.....	38.25	89	29.50	5,126	112,157	151,217

IV.—Harvest Forecast as Indicated by Condition of Field Crops on July 31, 1920, and as compared with 1919.

NOTE.—For Condition, 100=Average Yield per acre, 1910-19.

Field Crops.	Yield per acre, 1910-19.	Average Condition July 31, 1920.	Yield per acre, 1920.	Indicated Areas Sown, 1920.	Yield 1919 (Final Estimate)	Forecast of Yield, 1920.
	Bush.	p. c.	Bush.	000 acres.	000 bush.	000 bush.
Saskatchewan—Con.						
Barley.....	23.75	91	21.50	480	8,971	10,320
Rye.....	13.25	98	13.00	202	2,000	2,626
Peas.....	20.00	108	21.50	4.2	87	90
Beans.....	16.50	100	16.50	1.8	18.2	29.7
Mixed grains.....	30.25	96	29.00	21.4	771	621
Flax.....	9.30	91	8.50	1,032	4,490	8,772
Potatoes.....	148.25	98	145.25	62.8	11,250	9,122
Turnips, etc.....	249.25	101	250.75	13.9	3,591	3,499
	tons		tons		tons	tons
Hay and clover ¹	1.35	—	1.30 ¹	263	279	342
Alfalfa ¹	1.80	—	2.00 ¹	14.5	18.4	29 ¹
Corn, fodder.....	4.95	103	5.10	6.3	84	32
Alberta—						
Fall wheat ¹	20.75	—	24.60 ¹	38	640	935 ¹
Spring wheat.....	16.75	98	16.50	3,606	33,935	59,499
All wheat.....	17.00	—	16.50	3,644	34,575	60,434
Oats.....	36.25	98	35.50	2,906	65,725	103,163
Barley.....	25.50	99	25.25	418	10,562	10,555
Rye.....	19.25	103	19.75	88	1,173	1,738
Alberta—con.						
Peas.....	18.00	104	18.75	1.6	29	30
Beans.....	16.50	100	16.50	0.7	6.9	11.4
Mixed grains.....	28.50	100	28.50	25	943	713
Flax.....	9.10	104	9.50	84	222	798
Potatoes.....	151.50	102	154.50	43	8,241	6,644
Turnips, etc.....	227.25	98	222.75	12.3	2,769	2,740
	tons		tons		tons	tons
Hay and clover ¹	1.35	—	1.25 ¹	438	477	548 ¹
Alfalfa ¹	2.25	—	1.75 ¹	22	43	38.5 ¹
Corn, fodder.....	9.35	107	2.50	1	5	2.5
	bush.		bush.		bush.	bush.
Br. Columbia—						
Fall wheat ¹	20.75	—	25.50 ¹	14	314	357 ¹
Spring wheat.....	16.75	95	16.00	32.5	686	520
All wheat.....	17.00	—	17.50	46.5	1,000	877
Oats.....	36.25	96	34.75	49	2,127	1,703
Barley.....	34.00	95	32.25	10.4	346	335
Rye.....	16.25	95	15.50	5	110	77.5
Peas.....	27.25	101	27.50	2.2	52	61
Beans.....	16.50	98	16.25	1.7	29	28
Mixed grains.....	40.25	103	41.50	4.2	147	174
Potatoes.....	204.25	92	188.00	18	3,060	3,384
Turnips etc.....	435.50	87	379.00	7.5	2,696	2,842
	tons	tons			tons	tons
Hay and clover ¹	2.10	—	2.00 ¹	130	189	260
Alfalfa ¹	3.40	—	2.50 ¹	13.7	40	35 ¹
Corn, fodder.....	9.70	97	9.40	4.4	50	41

¹Preliminary estimate.

V.—Forecast of Yield of Wheat, Oats, Barley, Rye and Flax in the Prairie Provinces, as indicated by Condition on July 31, 1920, and as compared with 1919.

Field Crops.	Average Yield per acre 1910-19.	Yield per acre as indicated by condition.	Areas sown according to Estimate of June 30, 1920.	Total Yields as indicated by condition on July 31, 1920.
	bush.	bush.	acres.	bush.
Prairie Provinces—				
Wheat.....	16-50	15-25	15,771,000	238,617,800
Oats.....	34-25	31-75	9,919,000	313,820,500
Barley.....	24-50	22-75	1,763,000	40,337,000
Rye.....	15-50	14-75	557,600	8,244,200
Flax.....	9-25	8-75	1,178,000	10,190,000
Manitoba—				
Wheat.....	17-25	16-25	2,687,000	43,663,800
Oats.....	34-25	31-50	1,887,000	59,440,500
Barley.....	24-50	22-50	865,000	19,462,500
Rye.....	15-50	14-50	267,600	3,880,200
Flax.....	10-75	10-00	62,000	620,000
Saskatchewan—				
Wheat.....	16-00	14-25	9,440,000	134,520,000
Oats.....	33-25	29-50	5,126,000	151,217,000
Barley.....	23-75	21-50	480,000	10,320,000
Rye.....	13-25	13-00	202,000	2,626,000
Flax.....	9-30	8-50	1,032,000	8,772,000
Alberta—				
Wheat.....	17-00	16-50	3,644,000	60,434,000
Oats.....	36-25	35-50	2,906,000	103,163,000
Barley.....	25-50	25-25	418,000	10,554,500
Rye.....	19-25	19-75	88,000	1,738,000
Flax.....	9-10	9-50	84,000	798,000

CROP REPORTS FROM THE PROVINCES.

Maritime Provinces.—The hay crop is below average owing to dry weather, but is being saved in good condition. Rains towards the end of July improved the condition of grain crops, and the yield will be large. Potatoes too will yield heavily. Turnips are not so promising, cutworms having done much damage. Pastures are poor.

Quebec.—The excessive drought of May and June did great injury to the hay crop. It will be much below the average, whilst the abundant rainfall of July hindered haying. Great hopes are held that all grains will be superior to last year. Meadows, which suffered from drought, are picking up. Potatoes and vegetables are in excellent condition. A few farmers report great numbers of grasshoppers.

Ontario.—Reports from all parts of the province are very satisfactory, all crops promising big yields. Fall wheat has yielded above average in spite of many reports from southern counties that the Hessian fly had done serious injury to the crop. Threshing is proceeding, and the quality of the grain is said to be excellent. More

hay and clover have been harvested than was expected, though the yield was below average. Oats are everywhere a record crop, as also are potatoes. Corn is somewhat backward owing to the cool weather, but is improving. Pastures too have improved and the milk flow is plentiful. The ground is in good shape for ploughing and for the seeding of fall wheat. Sweet clover is an increasing crop.

Manitoba.—Dry weather till late in July checked the growth of all crops, and the yield will be somewhat lighter than was anticipated a month ago. Rains however fell later in the month over wide areas improving conditions greatly. Some southern districts received but light rains, however, and late grains and pasture were still suffering.

Saskatchewan.—At the end of June an exceptional harvest was expected, but the continued dry, hot weather throughout the first half of July threatened an almost complete failure. Rains came however in many districts on the 22nd and the 23rd of July, just in time to save a large proportion of the crops. Feed will be scarce in many parts, for wild hay and pastures were poor and tame hay is not very extensively grown. The straw of all grains is very short on account of the dry winds and hot weather, but the heads are now filling well and cutting will probably be general in about the first week of August in the southern part of the province, while it will perhaps not be general farther north until the middle of the month. Fall wheat is not so frequently planted this year as in former years, but barley is being more extensively grown, as conditions are very favourable for its growth and it finds a ready sale. Some damage has been done by grasshoppers, blight worms and "beet web" worms and army worms, especially in gardens; but the heavy rains have in many places washed away the worms and these pests are also being successfully reduced by poisoning. Isolated losses from hail are reported, while in many places gophers have done much damage. Tumbling mustard, pig-weed and lamb's quarters reduced the yield in many fields of grain. If weather conditions continue favourable an excellent although late crop should be harvested throughout the province.

Alberta.—On the whole, the crop outlook is good, with sufficient moisture in most localities, so that an average yield of wheat and oats is promised. In the southeast corner of the province around Winnifred and Medicine Hat crops will be lighter owing to scantier rainfalls. Flax and potatoes promise above average. The hay crop is fair. Damage from hail has been comparatively light.

British Columbia.—Crops are a little late but have an excellent appearance. Fruit is good with the exception of pears, which are only fair and strawberries many of which were winter-killed. Timothy is an excellent crop and all hay is good. In the Fraser valley, where the crops were in exceptionally good condition, the floods have done very great damage. Labour is very scarce but crops on the whole are above average.

TELEGRAPHIC CROP REPORTS.

Telegrams on crop conditions throughout Canada at the end of July were received from the Provincial Departments of Agriculture and the Dominion Experimental Farms and Stations by the Dominion Bureau of Statistics, and issued on August 3, 1920 as follows:

Atlantic Provinces.—**PRINCE EDWARD ISLAND:** The hay crop below average has been practically all saved under very favourable conditions. Occasional showers have been very beneficial to cereals, roots and potatoes, which promise yields above the average. Pastures good. Small fruits a full crop. Large fruits about average. July weather favourable for all crops. **NOVA SCOTIA:** (Kentville): A rain during early and latter part of month improved crops greatly. Hay average crop. Cereals short but appearance of filling well. Potatoes good, corn making rapid development. Roots fair. Pastures fair. Fruit fair to good, probably below average in yield. (Amherst): July most part fine and dry. Seven showers reported, precipitation 2.63 inches. Hay-making general by 19th. Grain, corn, sunflowers, potatoes and vegetables fair growth. Turnips, strawberries and raspberries poor. Currants fair. Apples medium and clean. Pasture fair. Cutworms bad. **NEW BRUNSWICK** (Fredericton): Frequent showers in July totalling slightly over two inches and favourable weather brought hay to average crop, except on dry land. Weather favourable for hay and grain. Corn and roots growing well and promise average crop. Potatoes suffered from dry weather after planting, stand uneven. Prospects are for less than average crop.

Quebec.—**QUEBEC** (Cap Rouge): Old meadows only fair. New ones very good. All grain, potatoes, corn for silage and field roots good. Tree fruits good, small fruits very good. Vegetables good, except cabbage, cucumbers and carrots, which are only medium. Ornamental plants good. (Ste. Anne de la Pocatière): First part of July was too dry to insure full success of crops. Beneficial rain of last two weeks improved all crops. Hay crop much below the average. Cereals short, but fairly promising. Potatoes are good. Small fruits abundant. Tree fruits fine, promise a good crop. (Lennoxville): The excessive amount of rain which has fallen on twenty days in July amounting to 7.64 inches has caused very rank growth of grain, which has lodged considerably. There is much hay yet to harvest. Swedes and potatoes average crop. Corn for silage very poor.

Ontario.—From the Ontario Department of Agriculture: Hay crop light. Catchy harvest weather. Fall wheat harvest rushing. Fair yield rye. Good barley and oats, promise well. Straw long, but soft. Spring wheat poorer. Corn looks late, but will improve. Early potatoes yielding well. Sugar beets and turnips look well. Mangolds poorer. Pastures good. Milk slow, but good for season.

Manitoba.—From the Manitoba Department of Agriculture: Reports generally are satisfactory. Good rains fell practically everywhere about July 20. Condition of all crops fair to good. No rust damage so far. Grasshoppers being held in check. Harvest will be earlier than usual. Fall rye being cut July 31. Wheat cutting likely to commence by August 10.

Saskatchewan.—From the Saskatchewan Department of Agriculture: Heavy rains during week ended July 24 greatly improved crop conditions, especially late crops. With more rain and cool weather expect an average yield, although rain came too late to save crops in some districts. (Indian Head): Dry, hot weather during first three weeks very hard on crops. Exceptionally heavy rain on 22nd and 23rd improved conditions. Crops generally about average. Grain filling well. (Rosthern): No rain in July till 22nd. This drought has ruined 25 per cent of crops. Two and one-quarter inches rain on 22nd and 23rd have brought on late seeding. Estimate 50 per cent crop in this district. No damage from hail or rust. Cutting likely to begin by middle of August. (Scott): Crop suffered from warm, dry weather during early July. Rainfall of over 3 inches on 22nd has improved situation. Prospects are now for fair to good crops.

Alberta.—(Lacombe): During July $1\frac{1}{2}$ inch rain fell. Grain crops on the whole good. In central Alberta some late crops suffered slightly from drought. Straw is short in some localities, but heads filling well. Damage from hail is not extensive. Hay short in this locality, but good further north. (Lethbridge): Rain has been fairly general in southern Alberta during July, consequently districts not suffering from drought during June are in good condition. In Winnifred and Medicine Hat districts and south to border crops light. Over balance of southern portion province crops are spotted but generally fair and some excellent.

British Columbia.—From the British Columbia Department of Agriculture: Rains during middle of July greatly helped all field crops. Weather generally settled now. Crops in general look promising. Oats and wheat heading out well. Hay now being cut and yield better than at first anticipated. Alfalfa, potatoes barley, mangolds, carrots and sugar beets good. Raspberries good. Other fruit prospects good. (Invermere): Hay and clover crop about average, yielding $2\frac{1}{2}$ tons per acre. All grains good, turnips favourable. Hot weather during month bringing wind and thunder laid some barley flat, but wheat and oats stood up well. (Summerland): Apple crops fair. No change from last report. Peaches good, pears full crop, apricots patchy but good. Hay crops below average. (Agassiz): July very dry and hot. Weeds controlled more easily than in June. Most crops doing well. Some early barley harvested. Average crop hay saved in excellent condition. Floods of Fraser river did damage. Mosquitoes and flies troublesome to live stock on pastures. (Sidney, V. I.): Weather conditions were favourable. Good crop of hay harvested. Oats and wheat ripening. Corn and roots developing well. Orchard fruit and small fruit conditions satisfactory.

CROP REPORTS FROM PROVINCIAL GOVERNMENTS.

Quebec.—The Quebec Bureau of Statistics reports (August 20) that, on the whole, the hay crop will suffice for ordinary needs in most counties, although in some, especially in the east, south and north of Quebec, hay will have to be imported, particularly where large lumbering operations are being carried on. The drought of the month of June last caused irreparable damage to the pastures and, in consequence, the production of butter and cheese will be less abundant this year than last. Cereals and potatoes in particular will yield more than the average of the last decennial period. Vegetables, fodder corn and corn for husking, fruit and root plants in certain regions will yield but little owing to drought and cold weather. Hay harvesting, which is over in the western part of the province, is being finished in the north and lower part of Quebec. The cereal harvest is begun and will probably finish at the end of the month (except in the Lower St. Lawrence part), provided the weather is favourable.

Ontario.—The Ontario Department of Agriculture reports (August 17) that the general success of the cereal crops is one of the leading features of the season. Barley and oats are spoken of by most representatives as bumper crops.

Manitoba.—The Manitoba Department of Agriculture reported (August 18) that wheat cutting was general by about the 10th. Reports as to yield vary greatly, but the general rains which fell on and after July 20 did much towards saving a rather critical situation, and the crop on the whole will be quite satisfactory. The season has been a poor one for potatoes.

Saskatchewan.—The following telegrams have been received from the Saskatchewan Department of Agriculture: August 9. Wheat cutting will start this week in a few places and be general about the 20th. An average crop of wheat is expected. Other grains above the average. Labour scarce in almost all districts. August 16. Cutting of early grains has started, will be general this week. Some black rust in southeastern districts, but wheat well advanced and not much damage will result. No scarcity of labour reported.

British Columbia.—The British Columbia Department of Agriculture reported (August 7) the following as the condition of crops on July 31, the numbers representing percentages of a normal or standard crop: Fall wheat, 94, spring wheat and barley 96, oats 95, rye 95, flax and peas 97·5, beans and buckwheat 97, mixed grains 102, corn for husking 99, potatoes 96, turnips 98, hay and clover 91, grain hay 96, alfalfa 99, corn for fodder 96, sugar beets 94, pasture 95.

INFLUENCE OF THE WEATHER UPON THE GROWTH OF SPRING WHEAT.

Table I on pages 197 and 198 records the observations collected during July from crop correspondents with reference to the dates (1) when heading was general; (2) of flowering stage; (3) of reaching milk stage; (4) of first cutting; (5) when cutting was general; and (6) of completion of cutting.

In the Maritime Provinces, while there were four records of heading during the first week of July, this stage was most general during the third week. (59 replies.) In Quebec, also, heading was most general during the third week (65 replies from a total for four weeks of 163). Ontario, Manitoba, and Saskatchewan were earlier, more records being received for the first half of the month, while in Alberta and British Columbia the largest number of replies were recorded for the third week. The flowering stage in the Maritime Provinces, Alberta, and British Columbia was not reached in most cases until the last week of July, while in the other provinces it was most general two weeks earlier. Throughout the Dominion the milk-stage followed in proportion, six replies being received during the first week, against 294 for the last week. Very few records of cutting of wheat were received, the largest number being 20 in Ontario. There were eight cases of cutting being completed, which occurred in Ontario during the last week of July.

Table II compares the data contained in Table I with the records of last year. Throughout the different stages it will be observed that the season this year is much later. There are only 28 records of first cutting against 335 for the same period last year. Ontario shows the earliest records for both years. While last year there were 43 records of cutting being completed, this year only eight were received, all occurring in Ontario.

I.—Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1920.

Province and District.	Heading General.				Flowering Stage.				Milk-stage.			
	No. of replies.	July 1-7.	July 8-14.	July 15-21. 22-31.	No. of replies.	July 1-7.	July 8-14.	July 15-21. 22-31.	No. of replies.	July 1-7.	July 8-14.	July 15-21. 22-31.
Prince Edward Island.....	24	-	2	11	5	-	-	2	3	-	-	-
Nova Scotia.....	61	2	3	42	20	1	-	5	14	8	-	1
New Brunswick.....	19	2	8	6	8	-	2	2	4	4	-	-
Quebec—												
North of St. Lawrence.....	47	12	14	13	29	2	12	9	6	24	2	9
South of St. Lawrence.....	48	4	14	24	33	1	2	14	16	17	-	4
Eastern Townships.....	40	8	12	20	26	-	6	7	13	16	1	4
Montreal Counties.....	28	6	14	8	19	-	4	12	3	23	1	5
Ontario—												
Eastern.....	23	9	9	3	21	2	8	9	2	20	-	9
Central.....	39	18	8	11	34	3	12	11	8	29	3	10
Western.....	29	14	8	7	20	3	5	7	5	21	2	4
Southern.....	13	6	3	4	11	-	3	7	1	12	1	3
Northern.....	20	7	4	8	15	1	5	5	4	12	1	2
Manitoba—												
Eastern.....	20	10	8	2	18	2	8	6	2	17	1	6
North Central.....	17	6	7	3	13	1	4	6	2	14	-	3
South Central.....	27	16	7	4	22	2	10	9	1	17	-	8
North Western.....	46	11	25	10	37	3	7	20	7	28	1	7
South Western.....	24	11	9	4	21	1	8	11	1	16	-	5
Saskatchewan—												
North.....	91	11	33	41	75	1	7	37	30	33	1	2
South.....	51	9	24	17	40	4	3	23	10	31	-	7
Alberta—												
North.....	58	-	13	38	41	-	-	8	33	11	-	1
South.....	21	4	2	13	16	1	2	3	10	8	-	3
British Columbia.....	7	1	2	3	5	2	-	-	3	3	-	-

II. Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1919 and 1920.

A. DATES OF HEADING.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of heading.....	23	24	77	61	31	19	159	163	169	124
July 1-7.....	—	—	1	2	4	2	27	30	66	54
July 8-14.....	—	2	7	3	3	8	39	54	44	32
July 15-21.....	4	11	33	42	17	6	67	65	51	33
July 22-31.....	19	11	36	14	7	3	26	14	8	5

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of heading.....	84	134	60	142	45	79	3	7	651	753
July 1-7.....	70	54	44	20	17	4	1	1	230	167
July 8-14.....	12	56	11	57	10	15	—	2	126	229
July 15-21.....	2	23	5	58	15	51	2	3	196	292
July 22-31.....	—	1	—	7	3	9	—	1	99	65

B. DATES OF FLOWERING.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of flowering.....	3	5	13	20	13	8	102	107	121	101
July 1-7.....	—	—	—	1	—	—	1	3	23	9
July 8-14.....	—	—	1	—	—	2	23	24	33	33
July 15-21.....	—	2	4	5	3	2	38	42	47	39
July 22-31.....	3	3	8	14	10	4	40	38	18	20

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of flowering.....	110	111	74	115	45	57	1	5	482	529
July 1-7.....	41	9	27	5	5	1	1	2	98	30
July 8-14.....	54	37	32	10	10	2	—	—	153	108
July 15-21.....	15	52	12	60	16	11	—	—	135	213
July 22-31.....	—	13	3	40	14	43	—	3	96	178

II. Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1919 and 1920—con.

C. DATES OF MILK-STAGE.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of milk-stage.....	1	—	5	8	6	4	72	80	144	94
July 1-7.....	—	—	—	—	—	—	1	1	5	4
July 8-14.....	—	—	—	—	—	—	4	3	24	6
July 15-21.....	—	—	1	1	1	—	14	22	53	28
July 22.....	1	—	4	7	5	4	53	54	62	56

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of milk-stage.....	129	92	76	64	22	19	2	3	457	364
July 1-7.....	9	1	2	—	—	—	—	—	17	6
July 8-14.....	23	1	9	1	2	—	1	—	63	11
July 15-21.....	74	29	48	9	10	4	—	—	201	93
July 22-31.....	23	61	17	54	10	15	1	3	176	254

D. DATES OF FIRST CUTTING.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of first cutting.....	—	—	1	—	—	—	2	2	144	20
July 1-7.....	—	—	—	—	—	—	—	—	4	1
July 8-14.....	—	—	1	—	—	—	—	—	12	—
July 15-21.....	—	—	—	—	—	—	1	1	20	7
July 22-31.....	—	—	—	—	—	—	1	1	108	—

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of first cutting.....	133	4	53	1	2	1	—	—	335	28
July 1-7.....	2	—	—	—	—	—	—	—	6	1
July 8-14.....	1	—	—	—	—	—	—	—	14	—
July 15-21.....	8	—	1	—	—	—	—	—	30	8
July 22-31.....	122	4	52	1	2	1	—	—	285	19

II. Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1919 and 1920—con.

E. DATES OF CUTTING GENERAL.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1920.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting general.....	—	—	—	—	—	—	—	1	88	11
July 1-7.....	—	—	—	—	—	—	—	—	2	—
July 8-14.....	—	—	—	—	—	—	—	—	9	—
July 15-21.....	—	—	—	—	—	—	—	—	15	1
July 22-31.....	—	—	—	—	—	—	—	1	62	10

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting general.....	42	—	11	—	1	—	—	—	142	12
July 1-7.....	—	—	—	—	—	—	—	—	2	—
July 8-14.....	—	—	—	—	—	—	—	—	9	—
July 15-21.....	—	—	—	—	—	—	—	—	15	1
July 22-31.....	42	—	11	—	1	—	—	—	116	11

F. CUTTING COMPLETED.

Dates.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting completed.....	—	—	—	—	—	—	—	—	42	8
July 1-7.....	—	—	—	—	—	—	—	—	—	—
July 8-14.....	—	—	—	—	—	—	—	—	3	—
July 15-21.....	—	—	—	—	—	—	—	—	11	—
July 22-31.....	—	—	—	—	—	—	—	—	28	8

Dates.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting completed.....	1	—	—	—	—	—	—	—	43	8
July 1-7.....	—	—	—	—	—	—	—	—	—	—
July 8-14.....	—	—	—	—	—	—	—	—	3	—
July 15-21.....	—	—	—	—	—	—	—	—	11	—
July 22-31.....	1	—	—	—	—	—	—	—	29	8

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The weather during July has been remarkably cool, with a good deal of rain and less sunshine than usual. The highest temperature recorded is 88·7, the lowest 45 and the mean 65·69; while for this period of 1919 the maximum was 99, the minimum 50, and the mean temperature 71·96. The average mean for July from 1911 to 1919 was 70·58. The rainfall, recorded on seventeen different days, totals 3·53 inches, compared with 1·59 inch a year ago, registered on nine different days, and compared with a July average of 2·42 inches for the previous nine years. The bright sunshine averages 7·37 hours a day, while for the corresponding period of 1919 it averaged 10·37 hours a day, and for the nine previous years 9·53 hours a day.

With the exception of the opening days of the month, the weather in the Ottawa district has been too unsettled for hay-making. However, by the end of the month, all hay has been saved, and, while the yield is lighter than usual, the hay is of good quality. At the Central Farm, an area of approximately one hundred acres has given an average return of about one and one-half ton per acre. The prospects as regards cereals have materially improved, conditions during the month having been almost ideal for the filling of the heads, and there is likely to be a heavy grain crop all through the Ottawa district. At the Experimental Farm, the harvesting of cereals was begun during the closing days of the month, the first field grain cut being a small area of barley. A start was made with the cereal plots on July 26th, when some early varieties of barley were cut, followed by a few early wheats. Roots and potatoes have continued to do well, and promise abundant yields. Corn has remained backward, on account of the absence of warm weather.

Charlottetown, P. E. I.—J. A. CLARK, Superintendent, reports: "The hay crop, though below the average in yield, has been all saved in very favourable condition and is of first quality. The occasional showers experienced have been very beneficial to cereals, potatoes and corn, and these at present promise full crops. Roots, which missed somewhat during the dry May, are doing very well and will probably give an average yield. Pastures are good and cows have kept up their milk flow very well. Small fruits have done better than usual, and the large fruits also promise a heavier yield than the average. In the Egg-laying Contest, such exceptional gains have been made during July, that, at the close of the month, the pens are all giving a much higher weekly production than during any previous period; the only change in feeding has been an increase in the amount of buttermilk per day."

Kentville, N. S.—W. S. BLAIR, Superintendent, reports: "The temperatures recorded during July range higher than usual, the mean being 66·05, as against 64·88 for the corresponding period from 1914 to 1919. The precipitation, distributed over eight different days, totals 2·70 inches; while the average July rainfall of the six

previous years was 2.84 inches. The bright sunshine aggregates 260 hours, compared with an average of 212.6 hours for the corresponding period from 1914 to 1919. Heavy showers on the first and the fourth materially benefited the hay crop, and the yields, while only running from poor to fair, have turned out better than seemed probable earlier. At the Station, clover averages slightly over two tons to the acre, while the marsh-land hay, consisting chiefly of timothy, averages from 2 to 2½ tons per acre. On dry areas, early planted potatoes suffered from lack of moisture during the middle of July, and, at the end of the month, are showing signs of maturity, with the prospects for a good yield not so bright as they were. Mangolds are making satisfactory growth, and the heat has favoured corn development. Turnips are making somewhat slow progress. Cereals are looking fairly promising, but the growth of straw is rather short, particularly on the poorer and drier areas. The apple crop seems to be coming on well, and the development of 'apple spot' is not so great as usual, which should result in very considerably increasing the amount of exportable fruit. The apple yield in the Annapolis Valley is variously estimated at from 800,000 to 1,200,000 barrels, the former figure being probably the outside limit of fruit which may prove suitable for export."

Nappan, N. S.—W. W. BAIRD, Superintendent, reports:—"Ideal summer weather has prevailed during July, the highest temperature recorded being 83 and the lowest 44, with a mean of 64.49; while for July of the previous seven years the average figures were 83.3 for maximum, 37.7 for minimum and 63.35 for the mean. The precipitation totals 2.63 inches and the bright sunshine aggregates 258.2 hours, compared with averages of 3.12 inches and 212.8 hours, respectively, for the corresponding month from 1913 to 1919. The number of hours of sunshine is greater than for any July since the keeping of meteorological records began at the Nappan Farm. In this district, haying was general on the 19th, the yield being probably not more than four-fifths of the average. Early potatoes are promising, but late potatoes are not looking so well. Grain and corn are only fair. Garden crops are excellent. Apples are not a very heavy crop, but the fruit is of very good quality."

Fredericton, N. B.—W. W. HUBBARD, Superintendent, reports:—"Conditions during July have been very favourable for crops, except on land without reserve moisture. The mean temperature, 66.6, is about as usual. The sunshine aggregates considerably above the average, while the precipitation at the Station totals only slightly above half the average, which is also the case over a considerable area, although many sections have had nearly the average of 3.7 inches. Crops, with the exception of hay, promise well. There never was a better outlook for oats and other cereals, while potatoes and roots are mostly doing well. Corn, also, is looking thrifty and is well forward. The potato crop, with about the same acreage as last season, has, in many fields, a large proportion of misses, and the Mosaic disease is quite general in the large potato-growing sections;

but an average yield is indicated if August brings sufficient moisture and 'late blight' does not come too severely. Pastures have kept up well, considering the dry conditions, and the milk flow is about normal. All classes of live stock are in good condition. At the Experimental Station, an average hay crop has been harvested. Fall wheat is ripe and all crops will be fully up to, if not above, the average. The fruit crop, both at the Station and elsewhere, is light, but the quality is generally good."

Ste. Anne de la Pocatière, Que.—JOS. BÉGIN, Superintendent, reports:—"July, on the whole, has been cooler than last year, with less bright sunshine. The highest temperature recorded is 86.4, the lowest 39.4 and the mean 61.7, compared with extremes of 87.6 and 39.8 and a mean of 62.1 for the same period in 1919. The precipitation amounts to 4.47 inches, this rain being recorded on eleven days; while a year ago it amounted to 4.22 inches, which was distributed over fifteen different days. The bright sunshine averages 6.7 hours a day, as against 7.4 hours a day for the same period last year. Haying has been nearly completed during the closing week of the month, the yield being about 80 p. c. of the average of the previous five years. Grain generally had made good progress during the latter part of July and is turning out better than anticipated, and there promises to be an average crop, but with shorter straw than usual. Indian corn and mangolds are backward and rather poor. Potatoes, in particular, and also turnips, are making satisfactory growth and should give good returns. Small fruits are abundant, while tree fruits are promising."

Cap Rouge, Que.—G. A. LANGEIER, Superintendent, reports:—"July has been cooler, wetter and duller than the average for the corresponding month for the last eight years, the figures being, respectively, 64.70 and 66.56 for mean temperature, 5.05 and 3.85 inches for precipitation, and 202.8 and 236.3 hours for sunshine. It rained on fourteen different days during the first three weeks, and haying was considerably delayed. At the Station, advantage was taken of the finer weather of the latter part of the month, and, by its close, practically all the hay is in. In general, the hay crop in the district is good to very good, with the exception of old meadows, which are yielding very little. Labourers are so scarce that farmers are paying from \$35 to \$42 per week and board, for men, during the haying season. Under such conditions, the production of foodstuffs is bound to decrease."

Lennoxville, Que.—J. A. MCCLARY, Superintendent, reports:—"More wet dull weather than usual has been experienced in July, rain falling on twenty days and giving a total precipitation of 7.66 inches, compared with 3.18 inches last year. The bright sunshine amounts to 222.9 hours, as against 239.6 hours a year ago. The highest temperature recorded is 85, the lowest 38, and the mean 64.15, while, a year ago, the maximum was 92, the lowest 40 and the mean 65.82. The excessive rainfall during the month has caused very rank growth of grain, which has lodged quite badly. In this

district, much hay remains to be harvested. Corn for ensilage is very poor. Swedes and potatoes are looking well."

Brandon, Man.—W. C. MCKILICAN, Superintendent, reports:—"The first three weeks of July were extremely dry, and this, following a similar period of drought in June, made conditions very unsatisfactory. Crops suffered very severely from the drought, and, as a result, will be very light, except on summer-fallow and other land which contained moisture conserved from 1919. Some rain came during the last part of the month, which stopped further deterioration of the crop, but was too late to cause increased growth except in corn, roots and very late grain. Rust has made its appearance during the last ten days, but, on account of the character of the crop, little damage from this cause is anticipated. Ripening is taking place rapidly, and cutting should be general by the end of the first week of August. The temperature has been about normal for July. No hail has been reported in this district so far."

Indian Head, Sask.—N. D. MACKENZIE, Superintendent, reports:—"The early part of July was extremely dry and hot, and crops throughout the district suffered severely. This was especially true of oats, barley and hay. Hay, on the Experimental Farm, which in June gave every promise of yielding at least two tons per acre, actually yielded less than one ton. On the 22nd and 23rd, there was one of the heaviest rains ever recorded at this Farm, the precipitation totalling nearly five inches. Since the rain, all crops have improved remarkably. Wheat promises to be nearly an average crop, and, while barley and oats have improved considerably, they will be still below the average in yield. Sunflowers, roots, potatoes and corn all promise excellent yields."

Rosthern, Sask.—WM. A. MUNRO, Superintendent, reports:—"The dry spell which prevailed a large part of the time during June continued until July 22nd. As a consequence of the drought, the hay crop is very short and there is grave danger of a feed shortage again next winter. The early sown grain crops have suffered severely, and those sown on ill-prepared land will not recover. On the 22nd and 23rd, a very welcome rainfall was experienced, about 2.25 inches being recorded within 24 hours. This is the heaviest rain on record at this Station and it has done much to revive crops in this district, which are expected to yield about 50 p. c. of normal. Sunflowers sown for ensilage are doing well, despite the long period of drought."

Scott, Sask.—M. J. TINLINE, Superintendent, reports:—"The weather during the first three weeks of July was warm and dry. From the 14th to the 21st, crops in many districts were drying up; but the rainfall of 3.74 inches, on the 22nd, is greatly bettering prospects, particularly for the later sown grain; while potatoes and roots and vegetable gardens are improving rapidly. Both native and cultivated grasses now give promise of good yields. At the Station, a twenty-acre field of Western Rye grass gave an average yield of $1\frac{1}{2}$ ton per acre. A heavy crop of bush fruits is being harvested."

Lacombe, Alberta.—B. C. MILNE, Assistant to the Superintendent, reports:—"Although the July precipitation totals 1.52 inch, the rain came in such light showers as not materially to affect the condition of the soil as regards moisture. Nevertheless, fair yields of grain are likely to be harvested, although the straw and hay yields will be light. On the whole, crops throughout central and northern Alberta are excellent. There should be plenty of hay in the province for next winter's feeding. The warm weather is hastening cereals to maturity, and the cutting of early wheat and fall rye has started in a few places. Live stock has done well throughout the summer, but prices on all classes of the same slumped towards the end of the month."

Lethbridge, Alberta.—W. H. FAIRFIELD, Superintendent, reports:—"During July, rains have been fairly general in southern Alberta. Consequently, the crops in all districts that had not suffered materially from drought during June are in good condition. Their general appearance, however, is not uniform, and, in travelling through this part of the province, one is struck by the lack of uniformity in growth, due to the irregular character of the showers of June. In the Winnifred and Medicine Hat districts and south to the border, taking in Manyberries, the grain is short and the crop will be light. From Lethbridge west to Macleod, where soil drifting occurred, the returns will also be small, for in this area the rains were not so heavy as in some other localities. Speaking generally, from the Red Deer river south, the crops are fair, and, in some localities, excellent. All crops on irrigated land are looking well. The first cutting of alfalfa was heavy, and very little of it was injured by rains while it was being put up."

Invermere, B. C.—R. G. NEWTON, Superintendent, reports:—"Warm weather came with the advent of July, and it has continued so fairly steadily throughout the month. One or two storms of thunder and wind have relieved the tension. The rainfall totals 1.32 inch. The first crop of hay and clover averaged about $2\frac{1}{4}$ tons to the acre, and of alfalfa about 2 tons. All grain, including the test plots, is looking very promising. Turnips are now in favourable condition, and mangolds are picking up from the cutworm ravages. At the Station heavy winds have laid low two lots of barley, but the wheat and oats have stood up well."

Summerland, B. C.—R. H. HELMER, Superintendent, reports:—"July has been warm, the highest temperature on every day but six exceeding 80. About the middle of the month, one or two good rains, giving a total precipitation of 0.84 of an inch, were experienced. Owing to the cold spring, the creeks have held up better than in previous years, although towards the end of the month they are getting low. Apples are a fair crop, plums poor, peaches good, apricots good in places but very irregular, pears, a full crop. The second crop of alfalfa has been cut, this being below the average. At the end of the month, the harvesting of grain in the district is general."

Agassiz, B. C.—W. H. HICKS, Superintendent, reports:—"July has been very dry and warm. The precipitation totals only 1.21 inch, which fell between the 12th and the 23rd. Conditions, following the cool, wet period of April, May and June, proved beneficial to all crops. In the hoed crops, it has been possible to control weeds with less effort; and corn has grown very rapidly. An average crop of hay has been saved in excellent condition, while cereals are maturing in good shape. Some of the early varieties of barley have been harvested at the close of the month. High water in the Fraser river has flooded some lower portions of the valley, causing considerable damage. Mosquitoes and flies are very troublesome to live stock on pasture."

Sidney, Vancouver Island, B. C.—LIONEL STEVENSON, Superintendent, reports:—"Weather conditions during July have been very favourable for the various lines of agriculture practised in this district. Haying operations have been completed, the yield being very satisfactory; and the price offered by the trade is the highest on record. Cereals benefited by the showers and made good development during the month. Barley has been harvested, while wheat and oats are nearly ripe. Strawberries, loganberries and raspberries, also currants and gooseberries completed the fruiting season with very satisfactory yields, excellent prices being forthcoming. The sweet and sour cherry harvest is largely over at the end of the month. Other orchard crops, excepting apples, promise well. Pastures are getting short. Live stock is in good condition and in brisk demand."

Meteorological Record for July, 1920.

The records of temperature, precipitation and sunshine at the Experimental Farms and Stations for the month of July are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature, F.			Precipitation in inches.	Hours of Sunshine.	
	Highest.	Lowest.	Mean.		Possible.	Actual.
Ottawa, Ont.....	88-70	45-00	65-69	3-53	473	228-6
Charlottetown, P.E.I.....	86-50	49-00	67-28	2-38	476	272-9
Kentville, N.S.....	90-00	43-00	66-05	2-70	272	260-0
Nappan, N.S.....	83-00	44-00	64-49	2-63	474	258-2
Fredericton, N.B.....	89-00	42-50	66-60	2-07	475	247-3
Ste. Anne de la Pocatière, Que.....	86-40	39-40	61-70	4-47	481	208-1
Cap Rouge, Que.....	85-00	43-20	64-70	5-05	479	202-8
Lennoxville, Que.....	85-00	38-00	64-15	7-66	473	222-9
Brandon, Man.....	92-00	39-00	62-40	2-18	491	280-9
Indian Head, Sask.....	100-00	39-00	65-06	5-24	494	299-8
Rosthern, Sask.....	95-00	38-00	66-48	2-53	507	377-8
Scott, Sask.....	97-70	37-70	61-88	3-74	505	327-6
Lacombe, Alberta.....	90-70	31-90	64-09	1-52	505	354-3
Lethbridge, Alberta.....	90-50	45-00	66-91	2-59	491	347-9
Invermere, B.C.....	92-00	41-00	65-90	1-32	494	333-8
Summerland, B.C.....	96-00	52-00	72-14	0-84	492	343-6
Agassiz, B.C.....	94-00	46-00	66-73	1-21	489	243-9
Sidney, Vancouver I., B.C.	88-00	46-00	63-00	0-67	486	335-0

Ottawa, August 18, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Ministry of Agriculture reports (August 1) that in all parts of the country July was a very wet month, and haymaking and root-cleaning were much delayed. Crops in general have suffered and are not so promising as a month ago. All crops are much in need of more sun. Many of the heavier crops of corn, especially winter barley and oats, have been beaten down, so that they will be difficult to harvest and will ripen slowly. The prospects of wheat and barley have not deteriorated to any appreciable extent in the eastern and some of the northern counties, but in the west these crops do not promise so well as a month ago. Wheat is generally healthy, but the yield is expected to be slightly under average. Barley seems to have suffered least of the three chief corn crops and should now give relatively as good a yield as wheat. Oats are still stunted in growth in many districts, and in the west and north generally will give poor yields, but the eastern counties should harvest nearly average crops. Some winter oats have been cut. Beans promise quite as well as a month ago and should give an over-average yield. The later pods have not filled well in the case of peas, and prospects are not quite so favourable as last month, but average yields are still hoped for.

Haymaking has been very protracted and is still far from finished in most districts. Crops of seeds' hay which were secured early were carted in good condition, but most of that harvested during July has been damaged by rain. In many districts quite half the meadow hay is still uncut and the quality is consequently deteriorating, as the crop is often laid and rotting at the bottom. Much of that which has been cut has been damaged. Yields are generally heavy, especially of meadow hay.

Summarising the returns, it would appear that beans, hops and hay will be the only crops to give over-average results. Expressing an average crop by 100, the appearance of the crops on August 1 indicated probable yields per acre shown by the following percentages: wheat, 98; barley, 98; oats, 95; beans, 103; peas, 100; potatoes, 95; turnips and swedes, 98; mangolds, 92; seeds' hay, 103; meadow hay, 105; and hops, 102. In the case of hay, it must be remembered that a proportion of the crop has been so damaged as to be unfit for use.

United States.—The Crop Reporting Board of the United States Department of Agriculture issued (August 9) estimates of the yield of the principal field crops with a statement of average condition on August 1, as compared with previous years, as in the following table:

Crops.	Condition in per cent of normal.				Total yield in millions of bushels, tons, lb. or bales.			
	Aug. 1, 1919.	July 1, 1920.	Aug. 1, 1920.	Aug. 1, 10-yr. average.	1919 final.	July forecast. ¹	Aug. forecast. ¹	1914-18 average.
	p.c.	p.c.	p.c.	p.c.	bush.	bush.	bush.	bush.
Winter wheat.....	—	—	—	—	732	518	533 ²	563
Spring wheat.....	53.9	88.0	73.4	72.0	209	291	262	259
All wheat.....	—	82.5	—	—	941	809	795	822
Corn.....	81.7	84.6	86.7	77.3	2,917	2,779	3,003	2,760
Oats.....	76.5	84.7	87.2	81.0	1,248	1,322	1,402	1,415
Barley.....	73.6	87.6	84.9	79.3	166	193	196	215
Rye.....	—	83.5	—	—	88.5	82.0	77.9 ²	59.9
Buckwheat.....	88.1	—	90.5	88.3	16.3	—	14.8	15.3
White potatoes.....	75.1	89.3	87.0	79.9	358	388	402	382
Sweet potatoes.....	87.1	87.2	86.9	83.1	104	98.5	101	75
Flax.....	52.7	89.1	80.1	72.9	8.9	14.4	14.3	12.9
Rice.....	90.4	90.0	88.7	88.2	41.1	52.1	52.0	33.4
Hay.....	91.0	86.7	90.5	84.8	tons 91.3	tons 84.8	tons 88.6	tons 81.4
Sugar beets.....	75.6	89.9	91.9	87.8	6.42	8.92	8.9	6.05
Tobacco.....	75.1	84.3	84.1	78.5	lb. 1,389	lb. 1,501	lb. 1,544	lb. 1,188
Cotton.....	67.1	70.7	74.1	75.6	bales 11.3 ³	bales 11.47	bales 12.5	bales 12.4 ³

¹Interpreted from condition reports.²Preliminary estimates.³Census.

The forecast of the total wheat crop, according to the condition of spring wheat on August 1 and the preliminary estimate of fall wheat, is a total yield of 795 million bushels, as compared with 941 million bushels in 1919 and with 822 million bushels, the average for the five years 1914-18. The August forecast is therefore 14 million bushels less than that of a month ago, it is 146 million bushels less than the final estimate for 1919 and is 27 million bushels less than the five-year average. Of corn the estimated yield is 3,003,000,000 bushels which is the largest since the record of 3,065,233,000 bushels in 1917. The forecast for oats is 1,402,000,000 bushels, as compared with 1,248,000,000 bushels in 1919 and 1,415,000,000 bushels, the five-year average.

The estimated average yields per acre for 1920, as compared with 1919 and with the five-year average, are as follows:

Crops.	1920	1919	Average 1914-18	Crops.	1920	1919	Average 1914-18
	bush.	bush.	bush.		bush.	bush.	bush.
Winter wheat.....	15.6 ¹	14.7	15.6	Buckwheat.....	19.7	20.6	17.8
Spring wheat.....	13.4	9.0	12.7	Potatoes.....	104.5	89.2	95.2
All wheat.....	14.8	12.8	14.6	Flax.....	8.4	5.3	7.5
Corn.....	29.0	28.6	26.1	Rice.....	38.6	37.7	35.7
Oats.....	34.2	29.4	32.1		tons	tons	tons
Barley.....	26.3	22.3	25.1	Tame hay.....	1.56	1.62	1.53
Rye.....	14.2 ¹	12.5	15.5	Wild hay.....	1.16	1.11	1.09
				Sugar beets.....	10.39	8.27	10.13

¹Preliminary estimate.

The acreage of 20 crops totals 339,127,100, as compared with 358,608,500 in 1919. The amount of oats remaining on farms on August 1 is estimated at 4.5 per cent of last year's crop, or about 56,420,000 bushels, as compared with 93,045,000 bushels on August 1, 1919, and 72,212,000 bushels of stocks on August 1 for the five years 1914-1918.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

The following reports on the condition of crops in the northern hemisphere are taken from the "International Crop Report and Agricultural Statistics" of July, 1920.

Germany.—The rainfall was sufficient almost everywhere, even in some places excessive. Wheat came on well and in some cases was too rank, but rye was less vigorous on account of a shortage of fertilizers. The condition of the crops on June 1, is expressed numerically as follows: wheat, 2.5; winter rye, 3.0; spring rye, 2.6; barley, 2.4; oats, 2.5; In the German scale used for expressing condition, 2=good and 3=average.

Sweden.—The condition of cereal crops on June 1, expressed in percentage of the decennial average, was as follows: winter wheat, 120; spring wheat, 97; rye, 105; barley, 103, oats, 106.

Czecho-Slovakia.—The condition of the cereal crops on June 1 is reported as follows:—

Crops.	Bohemia	Moravia.	Silesia.	Crops.	Bohemia	Moravia.	Silesia.
Winter wheat...	2.3	2.4	2.6	Winter barley..	2.6	2.0	2.6
Spring wheat...	2.4	2.4	2.7	Spring barley..	2.5	2.3	2.5
Winter rye.....	3.3	3.1	3.7	Oats.....	2.4	2.4	2.4
Spring rye.....	3.1	2.5	3.0	Maize.....	—	3.0	—

According to the country's reporting system, as expressed above, 2=above average; 3=average; 4=under average; 5=very bad.

British India.—The monsoon rainfall in June was defective nearly everywhere, but the distribution was satisfactory. Rain is needed in Bilhar, Western Bengal and Deccan.

Egypt.—Although inferior as a whole to last year, the yields of wheat and barley per acre show a great improvement. For rice, the weather was favourable during June, and the water supply was on the whole sufficient. The recent extension of the rice area has involved the continuation of sowing throughout the month. Early sown fields are looking well.

Holland.—During the first part of June the weather was favourable to cereal crops, and their condition, expressed in percentage of the decennial average, was as follows: winter wheat, 116; spring wheat, 105; rye, 112; barley, 105; oats, 115.

Other Countries.—The weather in *Belgium* has continued favourable to cereal crops, and there are no reports of special damage due to fungoid diseases or insect pests. In *Italy* the condition of winter cereals on July 1 was average. In *Luxemburg* the weather has been favourable to winter cereals, but has caused injury to spring crops. Prolonged drought has kept back growth. In *Serbia*, *Croatia*, and *Slavonia* the weather has favoured the progress of cereal crops. Winter wheat is expected to give an excellent yield, and spring crops are also very promising. In *Switzerland* winter cereals made great progress in May, but heavy rains about the end of the month caused the crops to lodge here and there. Spring cereals are fairly good in appearance.

Favourable reports in regard to potatoes have been received from Holland, Switzerland and Czecho-Slovakia and Sweden. The condition of potatoes on June 1 was 3 per cent under average at Luxemburg where prolonged drought has injured the crop.

FRUIT STATISTICS OF CANADA, 1919.

Last year it was decided to undertake the collection annually of statistics of fruit production, and the necessary arrangements were instituted by the Dominion Bureau of Statistics, acting in concert with the Fruit Branch of the Dominion Department of Agriculture. It proved to be impracticable to obtain for all Canada satisfactory statistics of the production in 1919 of all descriptions of fruit; and the effort was therefore limited to commercial apples and the sales of nursery stock. The forthcoming census should provide adequate data for the year 1920, as also a fitting starting point for the collection of more complete annual statistics in future. For the year 1919, a preliminary summary of the results obtained was issued by the Dominion Bureau on July 26, 1920.

COMMERCIAL PRODUCTION AND VALUE OF APPLES.

According to the information collected jointly by the Dominion Bureau of Statistics and the Fruit Branch of the Dominion Department of Agriculture, the commercial production of apples in Canada for the year 1919 was 3,334,660 barrels of the value of \$24,396,210, distributed by provinces as follows: Nova Scotia, 1,600,000 barrels, value \$9,989,680; New Brunswick, 40,000 barrels, value \$307,400; Quebec, 70,500 barrels, value \$527,950; Ontario, 878,860 barrels, value \$7,030,880; British Columbia, 2,236,000 boxes, equivalent to 745,300 barrels, value \$6,540,300. These figures represent average values per barrel of \$6.24 for Nova Scotia; \$7.68 for New Brunswick; \$7.50 for Quebec; \$8 for Ontario; \$8.78 for British Columbia, and \$7.30 for all Canada. The values represent wholesale prices. In the case of apples exported to the United Kingdom the value includes ocean freight rates which varied from \$2.50 to \$3 per barrel. For the province of Ontario, the total production of 878,860 barrels consists

of 24,432 barrels of early apples, 124,201 barrels of fall apples and 730,227 barrels of winter apples.

Table I shows for the year 1919 the production and value of commercial apples in Canada, and Table II shows for the year 1919 the production of apples in Ontario by Fruit Inspection Districts.

I. Production and Value of Commercial Apples in Canada, 1919.

Province.	Quantity.	Total Value.	Value per barrel.
	Barrels.	\$	\$
Nova Scotia.....	1,600,000	9,989,680	6.24
New Brunswick.....	40,000	307,400	7.68
Quebec.....	70,500	527,950	7.50
Ontario.....	878,860	7,030,880	8.00
British Columbia.....	745,300 ¹	6,540,300	8.78
Total.....	3,334,660	24,396,210	7.31

¹Equivalent to 2,236,000 boxes.

II. Production of Apples in Ontario by Fruit Inspection Districts, 1919.

No.	Inspection District.	Early Apples.	Fall Apples.	Winter Apples.	Total Apples.
		barrels.	barrels.	barrels.	barrels.
1	Ottawa and St. Lawrence Valley..	2,297	5,148	4,775	12,220
2	Pictou, South Bay and Lakes District.....	207	2,389	39,205	41,801
3	Wellington, Rednerville.....	78	7,115	12,248	19,441
4	Trenton.....	—	2,088	29,004	31,092
5	Brighton.....	341	1,441	21,781	23,563
6	Cobourg, Colborne and Port Hope	581	3,994	37,876	42,451
7	Bowmanville, Newcastle and Oshawa.....	159	1,195	25,663	27,017
8	Clarkson, Oakville, etc.....	7,880	12,240	61,233	81,353
9	St. Catharines.....	235	109	11,236	11,580
10	Fruitland—Beamsville.....	2,741	732	24,777	28,250
11	Simcoe—Thamesville.....	738	320	126,617	127,675
12	Middlesex.....	54	124	19,841	20,019
13	Essex and Lambton.....	1,455	14,398	57,555	73,408
14	Lake Huron.....	5,210	60,512	188,532	254,254
15	Georgian Bay.....	2,456	12,396	69,884	84,736
	Totals.....	24,432	124,201	730,227	878,860

NURSERY TREES, BUSHES AND PLANTS.

With a view to ascertaining, as accurately as possible, the quantities and values of the different varieties of nursery fruit trees, bushes and plants sold in Canada during the year 1919, schedules were issued to all fruit nurserymen in Canada, calling for a return of the number and value of the varieties of fruit trees, bushes and plants sold by them during the year ended September 30, 1919, apple trees

being divided into Early, Fall and Winter kinds. The replies received showed that the total value of the nursery fruit stock sold in Canada during the year amounted to \$227,627. Of apple trees 249,632 were sold to the value of \$73,269, comprising 39,139 Early apples, value \$11,108; 40,358 Fall apples, value \$11,534, and 170,135 Winter apples, value \$50,627.

The number and value of other descriptions of fruit trees, bushes and plants were as follows: TREES: pears, 50,662, value \$18,310; plums, 46,880, value \$17,595; peaches, 32,535; value \$6,813; cherries, 55,612, value \$19,756. BUSHES: currants, \$146,121, value \$25,343; grapes, 43,864, value \$5,320; gooseberries, 57,280, value \$13,709. PLANTS: raspberries, 395,336, value \$23,786; strawberries, 1,592,657, value \$23,201; blackberries, 14,000, value \$490, and loganberries, 330, value \$33.

The average wholesale price per tree, bush or plant works out as follows: Apples, from 28 to 30 cents; pears, 36 cents; plums, 38 cents; peaches, 21 cents; cherries, 36 cents; currants, 17 cents; grapes, 13 cents; gooseberries, 24 cents; raspberries, 6 cents; strawberries, \$1.46 per 100; blackberries, 4 cents; and loganberries, 10 cents.

The complete results of the inquiry are consigned to the following tables. Table III is a summary, for Canada and each of the provinces, of the number and value sold of each description of fruit, whilst Table IV gives the same information with the names of the varieties.

III. Total Quantities and Values of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, during the year ended September 30, 1919.

Description of Tree, Bush and Plant.	Varieties.	Sold.	Average price per unit.	Total Value.	Description of Tree, Bush and Plant.	Varieties.	Sold.	Average price per unit.	Total Value.
	No.	No.	cents.	\$		No.	No.	cents.	\$
Canada—					Nova Scotia—				
APPLES—Early..	21	39,139	.28	11,107.68	con.				
Fall...	19	40,358	.28	11,534.52	PEARS.....	6	253	.71	178.95
Winter	53	170,129	.30	50,626.93	Plums.....	15	921	.70	642.95
Total Apples...	93	249,626	.29	73,269.13	Peaches.....	1	35	.29	10.25
PEARS.....	11	50,662	.36	18,310.18	Cherries.....	10	474	.72	342.10
Plums.....	34	46,880	.38	17,595.36	SMALL FRUITS—				
Peaches.....	10	32,535	.21	6,813.30	Currants.....	7	1,556	.17	264.25
Cherries.....	26	55,612	.36	19,756.28	Grapes.....	4	14	.50	7.00
Small fruits—					Gooseberries...	3	458	.21	100.00
Blackberries...	1	14,000	.04	490.00	Raspberries...	7	9,052	.04	339.70
Currants.....	15	146,121	.17	25,343.56	per 100				
Grapes.....	13	43,864	.13	5,320.55	Strawberries...	4	855,525	.45	3,825.62
Gooseberries...	10	57,280	.24	13,708.80	Total Value..	—	—	—	8,885.36
Raspberries...	17	395,336	.06	23,785.80	Quebec—				
Strawberries...	28	1,592,657	per 100 1.46	23,201.41	APPLES—Early..	6	6,739	.32	2,129.90
Loganberries...	1	330	10.00	33.00	Fall...	8	3,506	.31	1,055.35
Total Value..	—	—	—	227,627.37	Winter	17	8,038	.28	2,293.05
Nova Scotia—					Total.....				
APPLES—Early..	12	1,850	.35	653.80		31	18,283	.30	5,478.30
Fall...	8	825	.48	396.45	PEARS.....	3	584	.25	144.00
Winter	28	7,019	.30	2,124.29	Plums.....	10	1,586	.44	693.00
Total.....	48	9,694	.33	3,174.54	Cherries.....	4	362	.49	176.00
					SMALL FRUITS—				
					Currants.....	6	665	.18	116.50
					Grapes.....	4	103	.35	35.75
					Gooseberries...	4	800	.28	220.70

III. Total Quantities and Values of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, during the year ended September 30, 1919.—con.

Description of Tree, Bush and Plant.	Varieties.	Sold.	Average price per unit.	Total Value.	Description of Tree, Bush and Plant.	Varieties.	Sold.	Average price per unit.	Total Value.
	No.	No.	cents.	\$		No.	No.	cents.	\$
Quebec—con.					British Columbia—con.				
Raspberries...	7	6,925	.03	216.88	Pears.....	5	22,462	.45	9,899.75
Strawberries...	4	7,100	1.53	219.00	Plums.....	9	10,064	.49	4,931.00
Total Value..	—	—	—	7,300.13	Peaches.....	1	8,673	.41	3,555.90
Ontario—					Cherries.....	8	10,185	.50	5,057.90
APPLES—Early.....	11	18,491	.20	3,734.86	SMALL FRUITS—				
Fall.....	9	15,373	.21	3,350.92	Currants.....	9	22,161	.30	6,684.40
Winter.....	40	65,534	.22	14,940.64	Grapes.....	6	5,507	.41	2,251.00
Total.....	60	99,398	.22	22,026.42	Gooseberries...	5	13,369	.24	3,155.35
Pears.....	11	27,363	.30	8,087.48	Raspberries...	5	54,979	.07	4,083.40
Plums.....	16	31,601	.26	8,316.26	per 100				
Peaches.....	8	23,827	.14	3,247.15	Strawberries...	8	219,679	1.25	2,727.50
Cherries.....	11	43,079	.30	12,687.03	Loganberries...	1	330	10.00	33.00
SMALL FRUITS—					Total Value..	—	—	—	84,144.40
Currants.....	9	101,887	.08	8,158.50	Prairie Provinces—				
Grapes.....	10	38,240	.07	3,026.80	APPLES—Early.....	4	612	.81	496.37
Gooseberries...	4	32,075	.12	3,789.50	Fall.....	1	10	1.00	10.00
Raspberries...	12	293,905	.04	10,625.87	Winter.....	1	382	.83	318.30
per 100					Total.....	6	1,004	.82	824.67
Strawberries...	18	338,425	1.18	4,012.89	Plums.....	7	2,708	1.15	3,012.15
Blackberries...	1	14,000	.04	490.00	Cherries.....	5	1,512	.99	1,493.25
Total Value..	—	—	—	84,467.90	SMALL FRUITS—				
British Columbia—					Currants.....	6	19,852	.51	10,119.91
APPLES—Early.....	7	11,467	.35	4,092.75	Gooseberries...	3	10,578	.61	6,443.25
Fall.....	6	20,644	.33	6,721.80	Raspberries...	5	30,475	.28	8,519.95
Winter.....	22	89,156	.33	30,950.65	per 100				
Total.....	35	121,267	.34	41,765.20	Strawberries...	3	164,728	8.00	12,416.40
					Total value..	—	—	—	42,829.58

IV. Quantities and Values of each Variety of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, in the year ended September 30, 1919.

Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
	No.	cents.	\$ c.		No.	cents.	\$ c.
Canada—				Canada—con.			
EARLY APPLES—				EARLY APPLES—con.			
Blush Calville.....	128	.16	21 02	Whitney (Crab)....	24	.39	9 58
Bough Sweet.....	17	.71	12 07	William's Favorite.	150	.33	49 50
Crimson Beauty.....	599	.22	135 65	Yellow Transparent	10,793	.28	3,101 82
Duchess of Oldenburg.....	18,663	.30	5,628 30	Odd Varieties.....	910	.21	187 12
Early Harvest.....	330	.17	55 70	Total.....	39,159	.28	11,107 68
Early Williams.....	15	.25	3 75	FALL APPLES—			
General Grant.....	26	.45	11 70	Alexandra.....	2,468	.16	413 94
Hibernal.....	362	.85	306 15	Antonovka.....	4	.47	1 88
Lievlend Raspberry	304	.35	107 75	Cellini.....	600	.33	198 00
Martha (Crab).....	1	.47	0 47	Con's Orange.....	1,676	.32	539 22
Queen's Choice (Crab).....	20	.47	9 40	Fallawater.....	17	.47	7 99
Red Astrachan.....	3,913	.23	916 41	Fall Pippin.....	25	.32	8 00
Red June.....	200	.33	66 00	Gravenstein.....	6,488	.33	2,169 17
Russian Transparent.....	2,000	.15	300 00	Maiden's Blush.....	56	.17	9 52
Saunders Hybrid... 20		.70	14 00	Magog Red Streak.	9	.47	4 23
Strawberry.....	93	.18	96 16	Peach.....	62	.36	22 70
Tetofsky.....	405	.23	91 90	Peasgood Nonsuch.	350	.32	115 00
Transcendant (Crab)	186	.33	62 43	Pumpkin Sweet....	60	.17	10 20
				St. Lawrence.....	2,302	.21	484 35

IV.—Quantities and Values of each Variety of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, in the year ended September 30, 1919—con.

Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
Canada—con.	No.	cents.	\$ c.	Canada—con.	No.	cents.	\$ c.
FALL APPLES—con.				PEARS—			
Scotch Pippin.....	25	.35	8 75	Anjou Beurre d'Anjou.....	1,110	.27	295.10
Standard Crab.....	500	.35	175 00	Bartlett.....	8,143	.35	2,834.55
Twentyounce Pip.....	7	.47	3 29	Clairgeau (Beurre Clairgeau).....	574	.44	257.48
Vorgul.....	5	.40	2 00	Clapp's Favorite.....	3,002	.33	1,000.09
Wealthy.....	23,938	.29	6,971 18	Duchess d'Angoulême.....	432	.25	108.26
York Beauty.....	50	.40	20 00	Flemish Beauty.....	1,186	.24	284.85
Odd Varieties.....	1,716	.21	370 10	Howell.....	437	.73	319.75
Total.....	40,358	.28	11,534.52	Kieffer.....	1,841	.23	428.75
WINTER APPLES—				Seckel.....	10	.43	4.30
Baldwin.....	3,774	.23	897 13	Sheldon.....	350	.32	111.50
Baxter.....	807	.28	227 89	Vermont Beauty.....	50	.50	25.00
Belleflower.....	175	.37	65 00	Assorted.....	33,527	.37	12,640.55
Ben Davis.....	2,834	.30	851 11	Total.....	50,662	.36	18,310.18
Bethel.....	228	.27	62 17	PLUMS—			
Bishop Pippin.....	128	.47	60 16	Abundance.....	175	.51	90.00
Black Ben.....	200	.25	50 00	Aitken.....	30	.75	22.50
Black Twig.....	380	.25	95 00	American.....	890	.20	175.10
Blenheim Orange.....	612	.18	110 50	Blue Damson.....	306	.64	197.50
Blue Peruvian.....	3	.47	1 41	Bradshaw.....	2,430	.34	821.25
Century.....	146	.16	23 36	Burbank.....	2,610	.45	1,186.55
Cox's Pippin.....	25	.90	22 50	Coe's Golden Drop.....	153	.75	114.75
Delicious.....	13,252	.31	4,160 20	De Sola.....	1,028	.91	942.30
Fameuse.....	7,015	.23	1,682 75	European.....	9,159	.20	1,799.21
Gano.....	512	.24	123 04	German Prune.....	1	.75	.75
Golden Russet.....	1,553	.23	350 16	Grand Duke.....	540	.62	336.10
Greenings.....	3,863	.30	1,167 15	Green Gage.....	73	.89	64.75
Grimes Golden.....	5,124	.32	1,683 17	Hawk Eye.....	5	.50	2.50
Hub Nonsuch.....	90	.16	14 40	Imperial Gage.....	140	.50	70.00
Hyslop Crabs.....	1,008	.32	331 13	Italian Prune.....	270	.61	164.75
Jonathan.....	4,501	.34	1,543 44	Japanese.....	4,269	.19	842.65
King of Tompkins.....	10,789	.32	3,466 32	Lombard.....	2,498	.28	705.75
Longfield.....	106	.17	18 16	Manitoba Selected.....	14	1.00	14.00
McIntosh Red.....	42,832	.30	12,937 39	Monarch.....	2,220	.19	432.00
McMahon's White.....	5	.40	2 00	Moor's Arctic.....	258	.63	163.50
Mann.....	362	.30	109 04	Montmorency.....	142	.50	71.00
Milwaukee.....	1,458	.22	323 91	Opat.....	237	1.24	294.60
Newtown Pippin.....	3,627	.33	1,232 00	Reach Plum.....	40	.50	20.00
Northern Spy.....	13,599	.22	3,122 48	Pond's Seedling.....	114	.56	64.00
North Star.....	168	.11	29 36	Red June.....	55	.77	42.35
Nugene.....	150	.35	52 50	Reine Claude.....	2,864	.33	937.10
Ontario.....	1,410	.26	375 75	Sapa.....	36	1.25	45.00
Pearless.....	1,000	.30	300 00	Shiro.....	1,605	.19	303.50
Pewaukee.....	2,115	.26	553 25	Shipper's Pride.....	12	.73	8.70
Ribston Pippin.....	193	.47	90 71	Surprise.....	30	.92	27.50
Rome Beauty.....	800	.32	258 00	Terry.....	1,333	1.25	1,666.25
Rose.....	300	.35	105 00	Victoria.....	20	.60	12.00
Salome.....	707	.36	255 00	Washington.....	32	.50	16.00
Scots Winter.....	292	.37	109 74	Yellow egg.....	203	.71	144.25
Snow.....	728	.33	241 05	Assorted.....	13,088	.44	5,797.20
Spitzenburg.....	875	.32	288 00	Total.....	46,880	.38	17,595.36
Scarlet Pippin.....	500	.35	175 00	PEACHES—			
Stark.....	3,028	.24	744 62	Alexander.....	25	.68	17.00
Sutton Beauty.....	300	.35	105 00	Champion.....	10	.50	5.00
Tolman.....	2,464	.22	556 21	Early Crawford.....	3,852	.16	636.75
Wagener.....	6,298	.30	1,889 91	Elberta.....	4,330	.15	641.00
Wellington.....	2	.47	0 94	Fitzgerald.....	185	.38	69.50
Winesap.....	1,510	.29	584 01	Greensboro.....	250	.10	25.00
Winter Arabka.....	36	.46	16 57	May Flower.....	122	.10	12.20
Winter Banana.....	2,950	.32	959 50	Niagara.....	25	.10	2.50
Winter Bough.....	5	.47	2 35	Prolific.....	130	.10	13.00
Wolf-River.....	1,864	.25	469 00	St. John.....	3,145	.13	404.50
Yellow Newton.....	150	.30	45 00	Assorted.....	20,461	.24	4,986.85
Odd Varieties.....	23,276	.33	7,718 49	Total.....	32,535	.21	6,813.30
Total.....	170,129	.30	50,626 93				
Grand Total.....	249,626	.29	73,255 13				

IV.—Quantities and Values of each Variety of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, in the year ended September 30, 1919—con.

Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
Canada—con.	No.	cents	\$ c.	Canada—con.	No.	cents	\$ c.
CHERRIES—				GOOSEBERRIES—			
Bing.....	253	.62	156.65	Boscop.....	10	.15	1.50
Black.....	103	.30	30.90	Carrie.....	6,789	.67	4,526.00
Black Eagle.....	4	.75	3.00	Champion.....	77	.21	16.55
Black Tartarian.....	150	.54	81.00	Columbus.....	500	.10	50.00
Compass.....	1,351	1.00	1,348.75	Downing.....	5,483	.14	784.50
Dyehouse.....	3	.75	2.25	Houghton.....	4,489	.38	1,655.92
Early Richmond.....	295	.72	212.65	Industry.....	175	.30	52.50
English Morello.....	35	.50	17.50	Oregon.....	528	.20	106.70
Governor Wood.....	102	.62	63.40	Pearl.....	2,699	.24	651.63
Hanska.....	8	1.50	12.00	Whitesmith.....	80	.40	32.00
Lambert.....	167	.75	125.25	Assorted.....	36,450	.16	5,831.50
May Duke.....	33	.51	16.75	Total.....	57,280	.24	13,708.80
Montmorency.....	6,344	.45	2,827.00				
Morello.....	190	.52	98.50	RASPBERRIES—			
Napoleon Bigarreau.....	1,170	.19	225.50	Black.....	10,675	.03	323.25
Oxheart.....	18	.30	5.40	Black Dell.....	1,800	.03	45.00
Red.....	50	.45	22.50	Black Perfection.....	600	.03	15.00
Richmond.....	450	.69	312.50	Brinkle.....	120	.05	6.00
Rocky Mt. bush.....	70	.75	52.50	Columbian.....	11,160	.03	388.50
Royal Anne.....	125	.63	78.25	Cumberland.....	3,153	.14	427.80
Schmidt's Bigarreau.....	700	.20	140.00	Cuthbert.....	54,530	.03	1,461.50
Sours.....	8,520	.20	1,667.60	Golden Queen.....	2,532	.04	109.20
Sweets.....	5,312	.20	1,042.68	Gregg.....	2,399	.03	80.90
Windsor.....	1,079	.24	259.75	Herbert.....	16,824	.05	913.53
Wolf.....	58	.95	55.00	King.....	8,574	.25	2,143.50
Yellow Spanish.....	25	1.00	25.00	Marlboro.....	1,375	.03	34.37
Assorted.....	28,997	.38	10,874.00	Red.....	21,000	.03	630.00
Total.....	55,612	.36	19,756.28	Shaffer.....	9	.10	.90
				St. Regis.....	12,593	.08	1,019.30
CURRENTS—				Sunbeam.....	14,993	.36	4,997.65
Black.....	3,595	.08	370.25	Superlative.....	100	.05	5.00
Boskoop.....	5,671	.09	510.35	Assorted.....	232,599	.05	11,184.40
Champion.....	20,372	.09	21,911.90	Total.....	395,336	.06	23,785.80
Cherry.....	5,098	.06	348.85				
Fay.....	117	.15	17.70	BLACKBERRIES—			
Fay Prolific.....	8,626	.07	584.10	Snyder.....	14,000	.04	490.00
Lee's Prolific.....	6,348	.42	2,654.65	Loganberries.....	330	.10	33.00
London Market.....	3,366	.50	1,683.00	STRAWBERRIES—		per 100	
Naples.....	10,680	.10	1,066.00	Bederwood.....	2,000	.50	10.00
Perfection.....	6,705	.61	4,116.65	Campbell.....	500	2.00	10.00
Red.....	3,114	.12	367.86	Dakota.....	1,100	2.00	22.00
Red Cross.....	16	.15	2.40	Dr. Burritt.....	500	.50	2.50
Victoria.....	528	.10	53.10	Dunlap.....	16,177	4.38	708.40
White.....	820	.8	62.40	Everbearing.....	183,351	6.93	11,716.62
White Grape.....	4,125	.39	1,590.20	Gibson.....	500	.50	2.50
Other varieties.....	66,940	.15	10,004.15	Glen Mary.....	17,460	.88	154.45
Total.....	146,121	.17	25,343.56	Island King.....	4,000	.60	24.00
				Konoka.....	1,000	.40	4.00
GRAPES—				Lorello.....	1,000	.70	7.00
Brighton.....	851	.31	260.50	Nagoon.....	9,600	1.40	134.75
Campbell.....	62	.30	18.50	New Discovery.....	500	.50	2.50
Campbell's Early.....	767	.06	45.30	No. 1017.....	1,000	3.00	30.00
Champion.....	30	.34	10.20	Oregon Early.....	600	.50	3.25
Concord.....	15,946	.05	865.75	Parsons' Beauty.....	3,460	.75	25.95
Delaware.....	210	.06	12.50	Paul Jones.....	1,650	.75	12.37
Lindley.....	300	.05	15.00	Paxton.....	2,000	.60	12.00
Moore's Diamond.....	16	.35	5.60	Peerless.....	1,200	2.00	24.00
Moore's Early.....	1,744	.05	80.55	President Drouard.....	5,000	1.50	75.00
Niagara.....	4,093	.11	466.40	Progressive.....	5,600	1.00	50.00
Red.....	1,200	.04	48.00	Royal Sovereign.....	1,000	2.00	20.00
Rogers.....	320	.05	16.00	Senator Dunlap.....	965,980	.45	4,277.15
Worden.....	3,955	.05	189.75	Superb.....	8,650	3.00	239.00
Assorted.....	14,370	.23	3,286.50	Warfield.....	500	.40	2.00
Total.....	43,864	.13	5,320.55	Williams.....	41,000	.75	300.00
				Wm. Belt.....	2,515	.85	21.07
				Assorted.....	315,414	1.68	5,310.90
				Total.....	1,592,657	1.46	23,201.41

IV.—Quantities and Values of each Variety of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, in the year ended September 30, 1919—con.

Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
Nova Scotia—	No.	cents	\$ c.	Nova Scotia—con.	No.	cents	\$ c.
EARLY APPLES—				PLUMS:			
Bough Sweet.....	6	.25	1.50	Blue Damson.....	23	.75	17.25
Crimson Beauty....	386	.26	99.44	Bradshaw.....	285	.67	192.25
Duchess.....	784	.33	246.60	Burbank.....	5	.30	1.50
Early Harvest.....	4	.47	1.88	Coe's Golden Drop..	3	.75	2.25
Early Williams.....	15	.25	3.75	German Prune.....	1	.75	.75
General Grant.....	26	.45	11.70	Grand Duke.....	35	.75	26.25
Martha (crab).....	1	.47	.47	Green Gage.....	14	.75	10.50
Queen's choice (crab)	20	.47	9.40	Lombard.....	83	.75	62.25
Red Astrachan.....	168	.45	75.56	Monarch.....	200	.63	126.00
Transcendent (crab)	39	.47	18.33	Moon's Arctic.....	138	.75	103.50
Whitney (crab).....	14	.47	6.58	Pond's Seedling....	10	1.00	10.00
Yellow Transparent	386	.46	178.12	Reine Claude.....	29	.75	21.75
Odd Varieties.....	1	.47	.47	Shipper's Pride....	12	.73	8.70
Total.....	1,850	.35	653.80	Shiro.....	5	.30	1.50
FALL APPLES—				Yellow egg.....	78	.75	58.50
Alexander.....	112	.47	52.44	Total.....	921	.70	642.95
Antonovka.....	4	.47	1.88	PEACHES—			
Cox's Orange.....	176	.25	44.22	Early Crawford....	35	.29	10.25
Fallawater.....	17	.47	7.99	Total.....	35	.29	10.25
Gravenstein.....	203	.46	92.67	CHERRIES—			
Magog Red Streak..	9	.47	4.23	Black.....	3	.30	.90
Twenty-ounce Pip..	7	.47	3.29	Black Eagle.....	4	.75	3.00
Wealthy.....	297	.64	189.73	Black Tartarian....	20	.80	16.00
Total.....	825	.48	396.45	Dyehouse.....	3	.75	2.25
WINTER APPLES—				Early Richmond....	175	.72	127.65
Baldwin.....	273	.41	110.93	Governor Wood.....	77	.73	55.90
Baxter.....	137	.47	64.39	May Duke.....	1	.75	.75
Ben Davis.....	529	.26	138.63	Montmorency.....	144	.75	108.00
Bethel.....	79	.47	37.13	Oxheart.....	18	.30	5.40
Bishop Pippin.....	128	.46	60.16	Windsor.....	29	.75	22.25
Black Twig.....	380	.25	95.00	Total.....	474	.72	342.10
Blenheim Orange..	12	.25	3.00	CURRENTS—			
Blue Peruvian.....	3	.47	1.41	Boskoop.....	330	.17	56.00
Fameuse.....	97	.47	45.59	Champion.....	302	.20	60.40
Golden Russet.....	50	.47	23.50	Cherry.....	388	.16	63.85
Greenings.....	8	.47	3.76	Fay.....	117	.15	17.70
Hyslop Crab.....	44	.47	20.68	Perfection.....	100	.15	15.00
King of Tompkins..	123	.32	39.77	Victoria.....	3	.20	0.60
McIntosh Red.....	627	.30	191.07	White Grapes.....	316	.16	50.70
Milwaukee.....	3	.47	1.41	Total.....	1,556	.17	264.25
Northern Spy.....	867	.27	237.53	GRAPES—			
North Star.....	8	.47	3.76	Brighton.....	1	.50	0.50
Ontario.....	2	.47	.94	Concord.....	1	.50	0.50
Ribston Pippin....	193	.47	90.71	Moore's Early.....	9	.50	4.50
Scots Winter.....	42	.47	19.74	Niagara.....	3	.50	1.50
Stark.....	696	.29	201.12	Total.....	14	.50	7.00
Tolman (Tallman Sweet).....	105	.47	49.35	GOOSEBERRIES—			
Wagener.....	2,273	.25	568.91	Downing.....	258	.18	56.00
Wellington.....	2	.47	.94	Houghton.....	51	.22	11.22
Winesap.....	8	.47	3.76	Pearl.....	149	.22	32.78
Winter Arabka.....	31	.47	14.57	Total.....	458	.21	100.00
Winter Bough.....	5	.47	2.35	RASPBERRIES—			
Wolf River.....	294	.32	94.18	Cumberland.....	3	.10	0.30
Total.....	7,019	.30	2,124.29	Cuthbert.....	2,755	.02	61.00
Grand Total.....	9,694	.33	3,174.54	Golden Queen.....	167	.10	16.70
PEARS:				Gregg.....	4	.10	0.40
Anjou (Beurre d'Anjou).....	10	.60	6.00	Herbert.....	1,114	.05	60.40
Bartlett.....	156	.72	112.05				
Clapps' Favorite....	73	.69	50.40				
Flemish Beauty.....	1	.75	.75				
Howell.....	12	.75	9.00				
Kieffer.....	1	.75	.75				
Total.....	253	.71	178.95				

IV.—Quantities and Values of each Variety of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, in the year ended September 30, 1919—con.

Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
Nova Scotia—con.	No.	cents	\$ c.	Quebec—con.	No.	cents	\$ c.
RASPBERRIES—con.				PLUMS—			
Shaffer.....	9	.10	0.90	Abundance.....	75	.20	15.00
St. Regis.....	5,000	.04	200.00	Blue Damson.....	172	.50	86.00
Total.....	9,052	.04	339.70	Bradshaw.....	190	.38	72.50
STRAWBERRIES—				Hawk Eye.....	5	.50	2.50
Everbearing.....	40,025	per 100 .63	250.62	Imperial Gage.....	40	.50	20.00
President Drouard..	5,000	1.50	75.00	Lombard.....	220	.50	110.00
Senator Dunlop.....	790,000	.40	3,250.00	Moor's Arctic.....	120	.50	60.00
Assorted.....	20,500	1.25	250.00	Montmorency.....	142	.50	71.00
Total.....	855,525	.45	3,825.62	Pond's Seedling.....	40	.50	20.00
Quebec—				Washington.....	32	.50	16.00
EARLY APPLES—				Assorted.....	550	.40	220.00
Duchess of Olden-				Total.....	1,586	.44	693.00
burg.....	4,261	.31	1,301.60	CHERRIES—			
Red Astrachan.....	387	.35	135.70	Early Richmond...	70	.50	35.00
Strawberry.....	5	.40	2.00	English Morello....	35	.50	17.50
Tetofsky.....	130	.35	46.00	Montmorency.....	115	.50	57.50
Yellow Transparent	1,954	.33	643.90	May Duke.....	32	.50	16.00
Odd Varieties.....	2	.35	0.70	Assorted.....	110	.45	50.00
Total.....	6,739	.32	2,129.90	Total.....	362	.49	176.00
FALL APPLES—				CURRENTS—			
Alexander.....	190	.25	46.75	Champion.....	120	.20	24.00
Fall Pippin.....	5	.40	2.00	Cherry.....	90	.20	18.00
Peach.....	62	.37	22.70	Fay Prolific.....	120	.20	23.50
St. Lawrence.....	417	.21	86.20	Lee Prolific.....	60	.17	10.00
Standard Crab.....	500	.35	175.00	Red.....	100	.08	8.00
Vorgul.....	5	.40	2.00	White Grape.....	175	.19	33.00
Wealthy.....	2,277	.31	700.70	Total.....	665	.18	116.50
York Beauty.....	50	.40	20.00	GRAPES—			
Total.....	3,506	.31	1,055.35	Campbell's Early..	42	.35	14.70
WINTER APPLES—				Champion.....	30	.34	10.20
Baldwin.....	630	.22	135.50	Moore's Diamond..	16	.35	5.60
Baxter.....	60	.35	21.00	Moore's Early.....	15	.35	5.25
Bethel.....	5	.40	2.00	Total.....	103	.35	35.75
Fameuse.....	115	.35	40.00	GOOSEBERRIES:			
Golden Russet.....	822	.25	203.70	Downing.....	475	.24	112.50
Greenings.....	141	.35	49.35	Houghton.....	110	.27	29.70
Langfield.....	5	.40	2.00	Industry.....	135	.34	46.50
McIntosh Red.....	3,553	.31	1,107.55	Whitesmith.....	80	.40	32.00
McMahan's White..	5	.40	2.00	Total.....	800	.28	220.70
Milwaukee.....	505	.35	177.00	RASPBERRIES:			
Northern Spy.....	1,060	.19	201.00	Brinkle.....	120	0.5	6.00
Peerless.....	950	.25	237.50	Columbian.....	210	0.5	10.50
Pewaukee.....	10	.40	4.00	Cuthbert.....	2,225	0.3	60.25
Scots Winter.....	50	.40	20.00	Golden Queen.....	795	0.5	39.25
Stark.....	42	.35	14.70	Gregg.....	150	0.5	7.50
Winter Arabka.....	5	.40	2.00	Herbert.....	425	0.6	23.38
Wolf River.....	80	.36	28.75	St. Regis.....	1,000	0.1	10.00
Total.....	8,038	.28	2,293.05	Assorted.....	2,000	0.3	60.00
Grand Total.....	18,283	.30	5,478.30	Total.....	6,925	0.3	216.88
PEARS—				STRAWBERRIES:			
Bartlett.....	232	.18	42.00	Glen Mary.....	1,000	.60	6.00
Clapp's Favorite..	60	.50	30.00	Williams.....	3,400	1.76	60.00
Flemish Beauty...	292	.25	72.00	Wm. Belt.....	1,000	.60	6.00
Total.....	584	.25	144.00	Assorted.....	8,900	1.65	147.00
				Total.....	14,300	1.53	219.00

IV. Quantities and Values of each Variety of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, in the year ended September 30, 1919—con.

Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
No.	cents	\$ c.	No.	cents	\$ c.		
Ontario—				Ontario—con.			
EARLY APPLES:				WINTER APPLES—con.			
Bough Sweet.....	122	.16	19.52	Wolf River.....	1,290	.21	280.07
Crimson Beauty.....	213	.17	36.21	Odd Varieties.....	3,157	.18	573.69
Duchess of Oldenburg.....	6,890	.24	1,640.45	Total.....	65,534	.22	14,940.64
Early Harvest.....	326	.17	53.82	Grand Total.....			
Red Astrachan.....	2,780	.18	496.65		99,398	.22	22,026.42
Russian Transparent	2,000	.15	300.00	PEARS:			
Strawberry.....	88	.17	14.96	Anjou (Beurre d'Anjou).....	945	.21	199.10
Tetofsky.....	275	.17	45.90	Bartlett.....	7,325	.34	2,434.50
Transcendent Crabs	40	.30	12.00	Clairgeau (Beurre Clairgeau).....	531	.43	230.48
Whitney Crab.....	10	.30	3.00	Clapp's Favorite.....	2,828	.32	896.59
Yellow Transparent	4,887	.20	969.15	Duchess d'Angoulême.....	432	.25	108.26
Odd Varieties.....	860	.17	143.20	Flemish Beauty.....	715	.21	149.70
Total.....	18,491	.20	3,734.86	Howell.....	425	.73	310.75
FALL APPLES:				Kieffer.....	1,840	.23	428.00
Alexander.....	707	.17	124.25	Seckel.....	10	.43	4.30
Fall Pippin.....	20	.30	6.00	Sheldon.....	350	.32	111.50
Gravenstein.....	705	.21	151.45	Vermont Beauty.....	50	.50	25.00
Maiden's Blush.....	56	.17	9.52	Assorted.....	11,912	.27	3,189.30
Pumpkin Sweet.....	60	.17	10.20	Total.....	27,363	.30	8,087.48
St. Lawrence.....	1,885	.21	398.15	PLUMS:			
Scotch Pippin.....	25	.35	8.75	Abundance.....	100	.75	75.00
Wealthy.....	10,230	.23	2,320.75	American.....	890	.20	175.10
Odd Varieties.....	1,685	.19	321.85	Blue Damson.....	50	.77	38.50
Total.....	15,373	.21	3,350.92	Bradshaw.....	1,890	.26	499.50
WINTER APPLES:				Burbank.....	2,605	.45	1,185.05
Baldwin.....	2,671	.21	584.70	Coe's Golden Drop.....	150	.75	112.50
Baxter.....	610	.23	142.50	European.....	9,159	.20	1,799.21
Belleflower.....	175	.37	65.00	Grand Duke.....	455	.58	262.35
Ben Davis.....	405	.22	85.48	Imperial Gage.....	100	.50	50.00
Bethel.....	144	.16	23.04	Japanese.....	4,269	.20	842.65
Black Ben.....	200	.25	50.00	Lombard.....	2,195	.24	533.50
Blenheim Orange.....	600	.17	107.50	Monarch.....	2,020	.15	306.00
Century.....	146	.16	23.36	Red June.....	55	.77	42.35
Delicious.....	2,730	.17	477.50	Reine Claude.....	2,835	.32	915.35
Fameuse.....	6,778	.23	1,582.16	Shiro.....	1,600	.19	302.00
Gans.....	617	.24	123.04	Yellow egg.....	100	.75	75.00
Golden Russet.....	681	.18	122.96	Assorted.....	3,128	.35	1,102.20
Greenings.....	3,332	.23	795.74	Total.....	31,601	.26	8,316.26
Grimes Golden.....	176	.17	29.92	PEACHES:			
Hub Non Such.....	90	.16	14.40	Elberta.....	4,200	.13	550.00
Hyslop Crab.....	30	.30	9.00	Early Crawford.....	3,690	.15	536.00
Jonathan.....	232	.16	37.94	Fitzgerald.....	185	.38	69.50
King of Tompkins.....	1,330	.19	261.90	Greensboro.....	250	.10	25.00
Longfield.....	101	.16	16.16	May Flower.....	122	.10	12.20
McIntosh Red.....	16,568	.21	3,909.37	Niagara.....	25	.10	2.50
Mann.....	362	.30	109.04	Prolific.....	130	.10	13.00
Milwaukee.....	950	.15	145.50	Yellow St. John.....	3,145	.13	404.50
Northern Spy.....	11,480	.22	2,543.40	Assorted.....	12,080	.14	1,634.45
North Star.....	160	.16	25.60	Total.....	23,827	.14	3,247.15
Nugene.....	150	.35	52.50	CHERRIES:			
Ontario.....	823	.21	175.01	Black.....	100	.30	30.00
Peerless.....	50	.35	17.50	Black Tartarian.....	75	.15	11.25
Pewaukee.....	2,105	.25	549.25	Governor Wood.....	25	.30	7.50
Rose.....	300	.35	105.00	Montmorency.....	6,000	.44	2,630.00
Salome.....	600	.35	210.00	Napoleon Bigarreau	1,170	.19	225.50
Scarlet Pippin.....	500	.35	175.00	Red.....	50	.45	22.50
Scots Winter.....	200	.35	70.00	Richmond.....	450	.69	312.50
Snow.....	728	.30	241.05	Schmidt's Bigarreau	700	.20	140.00
Spitzenburgh.....	25	.30	7.50				
Stark.....	2,290	.23	528.80				
Sutton Beauty.....	300	.35	105.00				
Tolman (Tallman Sweet).....	2,353	.21	505.06				
Wagener.....	50	.30	15.00				
Winter Banana.....	150	.30	45.00				

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Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
Ontario—con.	No.	cents	\$ c.	Ontario—con.	No.	cents	\$ c.
CHERRIES—con.				STRAWBERRIES—con.			
Sours.....	8,520	.20	1,667.60	New Discovery.....	500	.50	2 50
Sweets.....	5,312	.20	1,042.68	No. 1017.....	1,000	.3 00	30 00
Windsor.....	1,050	.23	237.50	Parson's Beauty.....	3,460	.75	25 95
Assorted.....	19,627	.65	6,360.00	Paul Jones.....	1,650	.75	12 37
Total.....	43,079	.30	12,687.03	Peerless.....	1,200	2 00	24 00
CURRENTS:				Progressive.....	5,000	1.00	50 00
Black.....	3,375	.08	257.25	Senator Dunlop.....	175,980	.60	1,027 15
Boskoop.....	3,316	.07	231.60	Superb.....	150	1.00	1 50
Champion.....	19,950	.09	1,827.50	Warfield.....	500	.40	2 00
Cherry.....	4,620	.06	267.00	Williams.....	37,600	.65	240 00
Fay Prolific.....	8,456	.07	550.60	Wm. Belt.....	1,015	.50	5 07
Naples.....	9,625	.10	945.00	Assorted.....	84,910	2.80	2,393 90
Red.....	2,650	.08	205.50	Total.....	338,425	1.18	4,012 89
Victoria.....	525	.10	52.50	BLACKBERRIES:			
White.....	820	.08	62.40	Snyder.....	14,000	.04	490 00
Other Varieties.....	48,550	.08	3,759.15	British Columbia:			
Total.....	101,887	.08	8,158.50	EARLY APPLES:			
GRAPES:				Duchess of Olden- burg.....	6,543	.35	2,285 50
Brighton.....	800	.26	210.00	Lievlend Raspberry.....	304	.35	107 75
Campbell's Early... Concord.....	725 15,825	.04 .05	30.60 797.75	Red Astrachan.....	578	.36	208 50
Delaware.....	200	.05	10.00	Red June.....	200	.33	66 00
Lindley.....	300	.05	15.00	Transcendent Crab. William's Favorite.....	107 150	.30 .33	32 10 49 50
Moore's Early.....	1,720	.04	70.80	Yellow Transparent Odd Varieties.....	3,566 19	.36 1.72	1,310 65 32 75
Niagara.....	4,030	.10	412.40	Total.....	11,467	.35	4,092 75
Red.....	1,200	.04	48.00	FALL APPLES:			
Rogers.....	320	.05	16.00	Alexander.....	1,459	.13	190 50
Worden.....	3,925	.05	182.25	Cellini.....	600	.33	198 00
Assorted.....	9,195	.13	1,234.00	Cox Orange.....	1,500	.33	495 00
Total.....	38,240	.07	3,026.80	Gravenstein.....	5,580	.34	1,925 05
GOOSEBERRIES:				Peasgood Nonsuch.....	350	.33	115 00
Columbus.....	500	.10	50 00	Wealthy.....	11,124	.33	3,750 00
Downing.....	4,750	.13	616 00	Odd Varieties.....	31	1.55	48 25
Houghton.....	1,500	.15	225 00	Total.....	20,644	.33	6,721 80
Pearl.....	1,675	.07	114 50	WINTER APPLES:			
Assorted.....	23,650	.12	2,784 00	Baldwin.....	200	.33	66 00
Total.....	32,075	.12	3,789 50	Ben Davis.....	1,900	.33	627 00
RASPBERRIES:				Cox Pippin.....	25	.90	22 50
Black.....	10,675	.03	323 25	Delicious.....	10,522	.35	3,682 70
Black Dell.....	1,800	.03	45 00	Fameuse.....	25	.60	15 00
Black Perfection... Columbian.....	600 10,950	.03 .03	15 00 378 00	Grimes Golden.....	4,948	.33	1,653 25
Cumberland.....	1,600	.03	40 00	Hyslop Crab.....	934	.32	301 45
Cuthbert.....	37,550	.03	997 25	Jonathan.....	4,269	.35	1,505 50
Golden Queen.....	1,770	.03	50 25	King.....	9,336	.33	3,164 65
Gregg.....	1,720	.03	43 00	McIntosh Red.....	22,084	.35	7,729 40
Herbert.....	12,585	.04	559 75	Newtown Pippin... Northern Spy.....	3,627 192	.33 .73	1,232 00 140 55
Marlboro.....	1,375	.03	34 37	Ontario.....	585	.34	199 80
Red.....	21,003	.03	630 00	Rome Beauty.....	800	.32	258 00
St. Regis.....	3,960	.03	99 00	Salome.....	107	.42	45 00
Assorted.....	188,320	.04	7,411 00	Spitzenburg.....	850	.33	280 50
Total.....	293,905	.04	10,625 87	Tolman.....	6	.30	1 80
STRAWBERRIES:				Wagener.....	3,975	.32	1,275 00
Bederwood.....	2,000	.50	10 90	Winesap.....	1,502	.38	580 25
Dr. Parrill.....	500	.50	2 50	Winter banana.....	2,800	.32	914 50
Gibson.....	500	.50	2 50	Wolf River.....	200	.33	66 00
Glen Mary.....	16,460	.90	148 45	Yellow Newton.....	150	.30	45 00
Island King.....	4,000	.60	24 00	Odd Varieties.....	20,119	.36	7,144 80
Konoka.....	1,000	.40	4 00	Total.....	89,156	.34	30,950 65
Larello.....	1,000	.70	7 00	Grand Total.....	121,267	.34	41,765 20

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Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
British Columbia				British Columbia			
—con.	No.	cents.	\$ c.	—con.	No.	cents.	\$ c.
PEARS:				GOOSEBERRIES:			
Ajou (Beurre d'Ajou).....	155	.58	90 00	Boscop.....	10	.15	1 50
Bartlett.....	450	.57	246 00	Champion.....	77	.21	16 55
Claireau (Beurre Claireau).....	43	.62	27 00	Industry.....	40	.15	6 00
Clapp's Favorite.....	41	.56	23 10	Oregon.....	528	.20	106 70
Flemish Beauty.....	178	.55	62 40	Pearl.....	14	.15	2 10
Assorted.....	21,615	.44	9,451 25	Assorted.....	12,700	.24	3,022 50
Total.....	22,462	.45	9,899 75	Total.....	13,369	.24	3,155 35
PLUMS:				RASPBERRIES:			
Blue Damson.....	61	.91	55 75	Cuthbert.....	12,000	.03	343 00
Bradshaw.....	65	.88	57 00	Golden Queen.....	100	.03	3 00
Grand Duke.....	50	.95	47 50	Gregg.....	525	.06	30 00
Green Gage.....	59	.92	54 25	St. Regis.....	1,000	.03	30 00
Italian Prune.....	270	.61	164 75	Superlative.....	100	.05	5 00
Peach Plum.....	40	.50	20 00	Assorted.....	41,254	.09	3,672 40
Pond's Seedling.....	64	.53	34 00	Total.....	54,979	.07	4,083 40
Victoria.....	20	.60	12 00				
Yellow Egg.....	25	.43	10 75	Logan berries.....	330	.10	33 00
Assorted.....	9,410	.48	4,475 00				
Total.....	10,064	.49	4,931 00	STRAWBERRIES:		per 100	
PEACHES:				Campbell.....	500	2 00	10 00
Alexander.....	25	.68	17 00	Dunlop.....	500	2 00	10 00
Champion.....	10	.50	5 00	Magoun.....	9,600	1 40	134 75
Early Crawford.....	127	.71	90 50	Oregon Early.....	600	.50	3 25
Elberta.....	130	.70	91 00	Paxton.....	2,000	.60	12 00
Assorted.....	8,381	.41	3,352 40	Royal Sovereign.....	1,000	2 00	20 00
Total.....	5,673	.41	3,555 90	Superb.....	8,500	2 80	237 50
CHERRIES:				Win. Belt.....	500	2 00	10 00
Bing.....	253	.62	156 65	Other Varieties.....	196,479	1 16	2,290 00
Black Tartarian.....	55	.97	53 75	Total.....	219,679	1 25	2,727 50
Early Richmond.....	25	1 00	25 00				
Lambert.....	167	.75	125 25	Prairie Provinces:			
Montmorency.....	85	.37	31 50	EARLY APPLES:			
Morello.....	190	.51	98 50	Blush Calville.....	17	.71	12 07
Royal Ann.....	125	.63	78 25	Duchess.....	185	.83	154 15
Yellow Spanish.....	25	1 00	25 00	Hibernal.....	362	.85	306 15
Assorted.....	9,260	.48	4,464 00	Saunders Hybrid.....	20	.70	14 00
Total.....	10,185	.50	5,057 90	Assorted (crabs).....	28	.36	10 00
CURRENTS:				Total.....	612	.81	496 37
Black.....	100	.25	25 00				
Boskoop.....	2,025	.11	222 75	FALL APPLES:			
Fay Prolific.....	50	.20	10 00	Wealthy.....	10	1 00	10 00
Lee Prolific.....	40	.20	8 00	Total.....	10	1 00	10 00
Naples.....	1,055	.11	121 00				
Perfection.....	550	.12	65 00	WINTER APPLES:			
Red.....	100	.25	25 00	Greenings.....	382	.83	318 30
Red Cross.....	16	.15	2 40	Total.....	382	.83	318 30
White Grape.....	25	.11	2 75	Grand Total.....	1,004	.82	824 67
Other varieties.....	18,200	.34	6,202 50				
Total.....	22,161	.30	6,684 40	PLUMS:			
GRAPES:				Aitken.....	30	.75	22 50
Brighton.....	50	1 00	50 00	De Sola.....	1,028	.91	942 30
Campbell.....	62	.30	18 50	Manitoba Selected.....	14	1 00	14 00
Concord.....	120	.56	67 50	Upata.....	237	1 24	294 60
Delaware.....	10	.25	2 50	Sapa.....	36	1 25	45 00
Niagara.....	60	.25	52 50	Surprise.....	30	.92	27 50
Warden.....	30	.25	7 50	Terry.....	1,333	1 25	1,666 25
Assorted.....	5,175	.40	2,052 50	Total.....	2,708	1 15	3,012 15
Total.....	5,507	.41	2,251 00				

V. Quantities and Values of each Variety of Fruit Trees, Bushes and Plants sold by Nurserymen in Canada, by provinces, in the year ended September 30, 1919—con.

Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.	Description and Variety of Tree, Bush and Plant.	Sold.	Average price per Unit.	Total Value.
Prairie Provinces—con.	No.	cents	\$ c.	Prairie Provinces—con.	No.	cents	\$ c.
CHERRIES:				GOOSEBERRIES:			
Compass.....	1,351	1.00	1,348.75	Carrie.....	6,789	.67	4,526.00
Early Richmond.....	25	1.00	25.00	Haughton.....	2,828	.49	1,390.00
Hanska.....	8	1.50	12.00	Pearl.....	861	.53	502.25
Rocky Mountain Bush.....	70	.75	52.50	Assorted.....	100	.25	25.00
Wolf.....	58	.95	55.00	Total.....	10,578	.61	6,443.25
Total.....	1,512	.99	1,493.25	RASPBERRIES:			
CURRENTS:				Cumberland.....	1,550	.25	387.50
Black.....	120	.73	88.00	Herbert.....	2,700	.10	270.00
Lees Prolific.....	6,248	.42	2,636.65	King.....	8,574	.25	2,143.50
London Market.....	3,366	.50	1,683.00	St. Regis.....	1,633	.42	680.30
Perfection.....	6,055	.67	4,036.65	Sunbeam.....	14,993	.36	4,997.65
Red.....	264	.49	129.36	Assorted.....	1,025	.04	41.00
White Grape.....	3,609	.42	1,503.75	Total.....	30,475	.28	8,519.95
Assorted.....	190	.22	42.50	STRAWBERRIES:		per 100	
Total.....	19,852	.51	10,119.91	Dakota.....	1,100	2.00	22.00
				Everbearing.....	143,326	8.00	11,466.00
				Dunlop.....	15,677	4.45	698.40
				Assorted.....	4,625	5.00	230.00
				Total.....	164,728	7.55	12,416.40

The returns as summarized in Table IV show that the varieties of each description are very numerous. Of early apples there were sold 21 varieties, of fall apples 18 and of winter apples 53. The varieties of pears were 11, of plums 34, of peaches 10, of cherries 26, of currants 15, of grapes 13, of gooseberries 10, of raspberries 17, and of strawberries 27. These quantities do not include miscellaneous assortments, or odd varieties, the names of which were not furnished. The varieties of which most numbers were sold were as follows: Early apples: Duchess of Oldenburg, 18,663; Yellow Transparent, 10,793; Fall apples: Wealthy, 23,938; Winter apples: McIntosh Red, 42,832; Northern Spy, 13,599; Delicious, 13,252; King of Tompkins, 10,789; Fameuse, 7,015; Pears: Bartlett, 8,143. Plums: European 9,159; Japanese, 4,269; Peaches: Elberta, 4,330; Early Crawford, 3,852; St. John, 3,145; Cherries: Soufs, 8,520; Montmorency, 6,344; Sweets, 5,312. Currants: Champion, 20,372; Naples, 10,680; Grapes: Concord, 15,946; Gooseberries: Downing, 5,483; Raspberries, Cuthbert, 54,530; Red, 21,000; Columbia, 11,160; St. Regis, 12,593; Black, 10,675. Strawberries: Senator Dunlop, 965,980; Williams, 41,000; Everbearing, 183,351.

THE WEATHER DURING JULY.

The Dominion Meteorological Office reports that the temperature was about the average in British Columbia, from 2° to 6° above in Alberta and Saskatchewan, from average to 3° above in Manitoba, average or slightly above in Prince Edward Island and Cape Breton,

and below average elsewhere over the Dominion, Ontario being very generally from 3° to 6° below, and Quebec, New Brunswick and Nova Scotia from 1° to 3° below. The precipitation was light in British Columbia conforming to the conditions which usually prevail there in July. In the western provinces it was very streaky, some districts receiving a large amount, while others in close proximity had very little, as for instance, Calgary recorded 4.9 inches against about 2 inches at Edmonton and Medicine Hat; Moosejaw 1.8 inch; Regina, 5.15 inches; Battleford, 4 inches; Prince Albert, 0.9 inch; Indian Head, 5.24 inches; Winnipeg, 0.8 inch. However, the localities with copious rainfalls were in excess of those with a small quantity. In Ontario, Quebec and the Maritime Provinces, except in a few isolated spots, the fall everywhere exceeded the average and in many places to a considerable extent.

PRICES OF AGRICULTURAL PRODUCE.

I.—Weekly Range of Cash Prices per Bushel of Canadian Grain at Winnipeg and Fort William, 1920.

SOURCE: Board of Grain Commissioners for Canada.

(For wheat, the quotations are Cash Prices with Participation Certificates of the Canadian Wheat Board.)

Grain and Grade.	July 3.		July 10.		July 17.		July 24.		July 31.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—										
No. 1 hard.....	2 15	—	2 15	—	2 15	—	2 15	—	2 15	—
No. 1 Nor.....	2 15	—	2 15	—	2 15	—	2 15	—	2 15	—
No. 2 Nor.....	2 12	—	2 12	—	2 12	—	2 12	—	2 12	—
No. 3 Nor.....	2 08	—	2 08	—	2 08	—	2 08	—	2 08	—
No. 4 special.....	2 02	—	2 02	—	2 02	—	2 02	—	2 02	—
No. 5 special.....	1 91	—	1 91	—	1 91	—	1 91	—	1 91	—
No. 6.....	1 81	—	1 81	—	1 81	—	1 81	—	1 81	—
Feed.....	1 71	—	1 71	—	1 71	—	1 71	—	1 71	—
Oats—										
No. 2 C.W.....	1 25½	—1 31½	1 18½	—1 29½	1 13½	—1 18	1 13½	—1 20½	0 93	—1 11
No. 3 C.W.....	1 25½	—1 31½	1 16½	—1 28½	1 10½	—1 16	1 10½	—1 17½	0 90	—1 08½
No. 1 feed ex.....	1 25½	—1 31½	1 16	—1 28½	1 10½	—1 16	1 10½	—1 17½	0 90	—1 08½
No. 1 feed.....	1 25	—1 31	1 15	—1 25½	1 08½	—1 12½	1 08½	—1 15½	0 88	—1 06½
Barley—										
No. 3 C.W.....	1 76	—1 92½	1 62	—1 80½	1 70	—1 75	1 75	—1 78½	1 34½	—1 45
No. 4 C.W.....	1 46	—1 62½	1 32	—1 47½	1 38	—1 43	1 45	—1 53	1 24½	—1 48
Rejected.....	—	—	1 36	—	1 33	—1 38	1 34	—1 41½	0 99½	—1 35
Feed.....	—	—	1 36	—	1 33	—1 38	1 34	—1 41½	0 99½	—1 35
Flax—										
No. 1 N.W.C.....	3 93½	—4 10½	3 73½	—3 86	3 63½	—3 85	3 51½	—3 83	3 36	—3 49
No. 2 C.W.....	3 89½	—4 06½	3 69½	—3 82	3 59	—3 81	3 47	—3 78	3 32	—3 45
No. 3 C.W.....	3 41½	—3 55	3 20	—3 35½	3 14	—3 35½	2 96	—3 32	2 77	—2 89

II.—Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1920.

(SOURCE: Monthly Crop Report of the U. S. Department of Agriculture.)

Grain and Market.	April.		May.		June.		July.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red, Winter, No. 2—								
St. Louis.....	2 64	—2 93	2 83	—3 12	2 75	—2 99	2 24	—2 91
Chicago.....	2 63	—2 87	2 83	—3 15	2 75	—3 00	2 29	—2 85
New York (f.o.b.) afloat.....	2 86	—3 16	3 10	—3 38	3 05	—3 20	2 58	—3 25
Corn, No. 2, mixed—								
St. Louis.....	1 71	—1 78	1 85	—2 13	1 77	—2 00	1 49	—1 78
Corn No. 2—								
Chicago.....	1 66½	—1 80	1 87	—2 17	1 76	—2 01½	1 40	—1 83½
Oats, No. 2—								
St. Louis.....	1 01	—1 09	1 03½	—1 17	1 07½	—1 22	0 70	—1 12½
Chicago.....	0 92½	—1 11½	1 00½	—1 17½	1 07	—1 29	0 72	—1 06
Rye, No. 2—								
Chicago.....	1 82½	—2 17	1 98	—2 29	2 13	—2 41	1 71	—2 35½

III.—Prices of Imported Grain and Flour at British Markets, 1920.

SOURCE: For Mark Lane, London, "The Mark Lane Express;" for Liverpool, "Broomhall's Corn Trade News."

MARK LANE.		July 5-26.		LIVERPOOL.		July 6-27.	
		\$ c.	\$ c.			\$ c.	\$ c.
Wheat—				Wheat—			
Canadian No. 1.....		2 79½	—	Nor. Man. No. 1....		3 01½	—
Canadian No. 2.....		2 76½	—	Nor. Man. No. 2....		2 98½	—
American Spring.....		2 76½	—	Nor. Man. No. 3....		2 95½	—
American hard winter.....		2 79½	—	Red Winter, No. 2..		2 95½	—
American red No. 2.....		2 73½	—	Hard " No. 2..		2 98½	—
Australian.....		2 88½	—	Australian.....		3 04½	—
Argentine.....		2 82½	—				
Oats—							
Canadian.....		1 62½	—1 65½				
American.....		1 57½	—1 60½				
Argentine ¹		1 39½	—1 42½				
Flour (per 280 lb.)—							
Canadian spring.....		16 00	—				
American spring.....		16 00	—				
American winter.....		16 00	—				
Australian.....		16 00	—				

¹For July 5—\$1.50—1.52½.

IV.—Average Prices of British-grown Grain, 1920.

SOURCE: "London Gazette," published pursuant to s. 8 of the Corn Returns Act, 1882.

Week ended—		Wheat.		Barley.		Oats.	
		per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
		s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
July 3.....		83 10	2-550	95 4	2-783	65 0	1-722
" 10.....		84 10	2-580	90 11	2-655	64 9	1-716
" 17.....		85 3	2-593	91 11	2-684	64 5	1-707
" 24.....		84 10	2-580	86 1	2-514	64 7	1-712
" 31.....		84 11	2-583	80 10	2-360	64 10	1-718
Average.....		84 9	2-577	88 12	2-599	64 9	1-715

V.—Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1920.

SOURCE: For Montreal, Trade Bulletin; for Toronto, Dealers' quotations; for Winnipeg and U.S. Cities, "The Northwestern Miller," Minneapolis.

Month.	Montreal.				Toronto.			
	Flour Manitoba Standard grade.	Flour Ontario del'd at Montreal.	Bran.	Shorts.	Standard Flour. (Jute bags).	Standard Flour. (Cotton bags.)	Bran.	Shorts.
1920.	Per bbl. \$ cts.	Per bbl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.	Per bbl. \$ cts.	Per bbl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.
January.....	13 34	9 75	44 70	52 25	13 25	13 40	45 25	52 25
February.....	13 40	10 90	45 25	52 25	13 25	13 45	45 25	52 25
March.....	13 40	10 76	45 25	52 25	13 25	13 45	45 25	52 25
April.....	13 47	10 76	48 87	55 87	13 40	13 60	51 25	58 25
May.....	14 55	11 38	53 50	60 50	14 85	15 05	54 25	61 25
June.....	14 95	13 25	54 25	61 25	14 85	15 05	54 25	61 25
July.....	14 92	Nominal	54 25	61 25	14 85	15 05	54 25	61 25

Month.	Winnipeg.				Minneapolis.				Duluth.	
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.	Shorts.	Flour.	Shorts.
1920.	Per bbl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.	Per bbl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.	Per bbl. \$ cts.	Per ton. \$ cts.	Per bbl. \$ cts.	Per ton. \$ cts.
January.....	12 65	39 00	46 00	14 53	41 58½	42 70	44 37	45 10	14 18	14 43
February.....	12 65	39 00	46 00	13 41	14 20	42 50	43 37½	47 83	13 35	13 66
March.....	12 65	39 00	46 00	13 37½	14 25	47 00	48 25	51 50	13 55	13 63½
April.....	12 76½	43 50	50 50	14 55	15 01	49 66	50 50	54 00	14 25	14 50
May.....	13 64	46 80	53 80	15 28	15 09	53 00	53 40	57 25	14 95	15 30
June.....	14 30	48 00	55 00	14 02	14 60	50 75	52 62½	56 00	14 15	14 50
July.....	14 30	48 00	55 00	13 68	14 00½	47 00	48 12½	53 25	14 17½	14 37½

NOTE.—The ton=2,000 lb. and the barrel = 196 lb.

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	February.	March.	April.	May.	June.	July.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Montreal—						
Steers, heavy finished.....	—	—	15-50	—	15-75	—
Steers, 1,000-1,200 lb., good.....	12-625	13-54	14-18	15-25	15-9125	14-50
Steers, 1,000-1,200 lb., common.....	11-215	—	—	—	—	12-00
Steers, 700-1,000 lb., good.....	12-083	12-34	13-62	14-20	14-6875	13-65
Steers, 700-1,000 lb., common.....	10-562	11-00	11-57	12-00	12-8125	10-95
Heifers, good.....	11-25	12-03	13-52	13-50	14-0625	12-70
Heifers, fair.....	9-92	10-34	10-72	11-25	11-75	10-40
Heifers, common.....	8-37	8-00	8-90	9-65	9-125	7-75
Cows, good.....	10-062	11-10	11-58	11-65	11-8125	10-65
Cows, common.....	8-25	8-27	8-62	9-00	9-25	7-75
Bulls, good.....	10-25	10-66	11-86	11-10	11-625	10-583
Bulls, common.....	8-50	8-70	9-02	9-25	9-50	6-70
Canners and Cutters.....	6-00	6-05	6-24	6-35	6-3125	4-75
Oxen.....	9-25	10-61	—	11-25	12-50	10-00
Calves, veal.....	17-75	16-24	14-48	12-10	12-5625	10-20
Calves, grass.....	8-20	7-96	—	—	8-25	7-25
Stockers, 450-800 lb., good.....	—	—	—	—	—	—
Stockers, 450-800 lb., fair.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., good.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	19-862	20-22	20-93	21-00	20-4375	21-04
Hogs (fed and watered), heavies.....	—	—	20-75	20-50	19-516	18-875
Hogs (fed and watered), lights.....	19-687	19-93	20-57	20-80	—	18-90
Hogs (fed and watered), sows.....	15-85	16-23	16-71	16-90	16-337	16-87
Hogs (fed and watered), stags.....	—	—	—	—	—	13-90
Lambs, good.....	16-75	17-33	16-29	—	18-1666	14-90
Lambs, common.....	16-06	16-55	15-22	—	—	13-125
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	11-30	12-73	12-59	12-25	10-925	8-62
Sheep, common.....	9-97	11-81	11-56	11-50	9-50	7-45
Toronto—						
Steers, heavy, finished.....	13-33	13-74	14-25	15-15	15-195	15-55
Steers, 1,000-1,200 lb., good.....	12-722	13-13	13-57	14-47	14-85	14-65
Steers, 1,000-1,200 lb., common.....	—	9-59	11-53	12-85	12-64	12-50
Steers, 700-1,000 lb., good.....	11-912	12-33	13-04	13-85	14-84	14-20
Steers, 700-1,000 lb., common.....	8-952	9-56	10-70	11-71	11-8225	11-85
Heifers, good.....	11-087	12-38	12-95	13-83	14-60	14-05
Heifers, fair.....	9-96	10-30	11-02	12-07	13-142	12-15
Heifers, common.....	8-35	8-52	9-29	10-23	10-775	9-75
Cows, good.....	10-07	10-54	10-75	11-56	12-8125	11-90
Cows, common.....	8-082	8-62	8-68	9-66	11-0825	9-75
Bulls, good.....	10-11	10-27	10-55	11-69	12-172	11-20
Bulls, common.....	7-99	8-62	8-91	9-64	10-112	8-70
Canners and Cutters.....	5-852	5-93	6-04	6-09	5-855	4-90
Oxen.....	—	—	—	—	—	—
Calves, veal.....	18-687	19-18	16-45	15-43	15-58	16-85
Calves, grass.....	7-98	8-25	10-00	—	—	—
Stockers, 450-800 lb., good.....	9-36	9-90	10-35	11-32	11-557	9-85
Stockers, 450-800 lb., fair.....	7-93	8-86	9-21	1-67	10-15	8-60
Feeders, 800-1,000 lb., good.....	10-64	11-21	11-62	12-55	12-912	11-65
Feeders, 800-1,000 lb., fair.....	—	10-50	10-93	11-81	11-082	10-125
Hogs (fed and watered), selects.....	19-035	19-62	20-15	20-23	19-59	20-60
Hogs (fed and watered), heavies.....	18-25	18-32	18-71	19-14	18-617	19-6875
Hogs (fed and watered), lights.....	16-95	17-45	18-03	18-14	17-7533	18-60
Hogs (fed and watered), sows.....	15-02	15-43	15-98	16-25	15-425	16-80
Hogs (fed and watered), stags.....	13-50	13-59	13-50	14-22	14-25	—
Lambs, good.....	19-657	19-86	18-65	16-77	19-1675	17-25
Lambs, common.....	16-10	15-50	15-72	15-01	17-385	15-10
Sheep, heavy.....	—	—	—	—	18-25	—
Sheep, light.....	11-495	13-23	14-60	14-09	12-18	10-45
Sheep, common.....	6-30	7-07	6-86	7-68	7-535	7-45
Winnipeg—						
Steers, heavy, finished.....	11-83	12-13	13-37	15-01	15-227	12-30
Steers, 1,000-1,200 lb., good.....	11-347	11-53	12-45	14-10	14-495	11-746
Steers, 1,000-1,200 lb., common.....	8-83	9-00	9-00	9-50	10-00	8-96
Steers, 700-1,000 lb., good.....	10-022	10-11	11-46	13-35	13-3975	10-70
Steers, 700-1,000 lb., common.....	7-905	8-73	9-13	—	9-00	7-708
Heifers, good.....	10-27	11-07	11-36	13-40	13-3825	10-88
Heifers, fair.....	8-19	8-93	9-32	10-26	10-29	8-488
Heifers, common.....	6-25	6-75	7-25	8-00	7-56	6-148

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	February.	March.	April.	May.	June.	July.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Winnipeg—con.						
Cows, good.....	9.037	9.44	10.24	11.43	11.445	9.484
Cows, common.....	7.13	7.44	7.95	8.68	8.6875	7.026
Bulls, good.....	7.84	7.15	8.21	9.42	9.282	6.696
Bulls, common.....	6.07	6.19	6.37	6.90	6.778	5.443
Canners and Cutters.....	5.155	5.09	4.54	4.41	4.3725	3.886
Oxen.....	6.71	8.32	6.00	—	8.25	7.128
Calves, veal.....	10.612	11.01	12.59	13.21	11.5475	10.572
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8.32	9.29	8.63	8.63	8.91	7.418
Stockers, 450-800 lb., fair.....	6.82	7.39	7.42	7.91	7.145	6.012
Feeders, 800-1,100 lb., good.....	10.43	10.60	10.63	11.94	10.365	9.546
Feeders, 800-1,100 lb., fair.....	8.73	9.69	9.09	9.80	8.852	7.534
Hogs (fed and watered), selects.....	18.797	20.70	20.03	21.61	19.395	18.50
Hogs (fed and watered), heavies.....	16.65	18.48	17.91	19.65	17.252	16.492
Hogs (fed and watered), lights.....	15.715	19.00	17.72	19.56	17.1125	16.674
Hogs (fed and watered), sows.....	15.367	15.56	16.00	17.92	15.367	14.504
Hogs (fed and watered), stags.....	—	12.50	12.46	15.32	13.245	17.492
Lambs, good.....	14.375	15.03	15.00	15.65	15.995	17.974
Lambs, common.....	—	—	—	—	—	8.25
Sheep, heavy.....	11.50	—	—	—	—	—
Sheep, light.....	12.25	12.01	12.00	12.20	12.6075	9.658
Sheep, common.....	6.00	8.00	—	8.00	7.88	6.476
Calgary—						
Steers, heavy, finished.....	10.92	12.08	12.35	14.63	14.083	11.00
Steers, 1,000-1,200 lb., good.....	11.00	11.53	12.02	13.72	13.00	10.30
Steers, 1,000-1,200 lb., common.....	9.67	9.90	10.00	10.76	12.85	—
Steers, 700-1,000 lb., good.....	9.75	10.00	10.00	13.30	12.8333	—
Steers, 700-1,000 lb., common.....	9.00	9.25	9.25	10.35	—	—
Heifers, good.....	9.75	10.34	11.00	13.50	13.25	8.25
Heifers, fair.....	9.08	9.63	10.10	—	—	—
Heifers, common.....	7.75	8.67	—	—	—	—
Cows, good.....	9.312	10.13	10.48	13.06	12.0625	8.96
Cows, common.....	7.762	7.86	7.92	9.57	8.35	7.138
Bulls, good.....	7.44	7.79	8.12	9.50	—	—
Bulls, common.....	6.50	6.75	7.14	—	5.50	5.00
Canners and Cutters.....	4.50	4.21	4.00	—	—	—
Oxen.....	—	—	—	—	—	—
Calves, veal.....	8.875	9.50	8.43	11.95	13.50	11.716
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	7.75	8.11	8.50	9.09	9.187	8.33
Stockers, 450-800 lb., fair.....	6.94	6.89	7.50	8.60	8.037	7.61
Feeders, 800-1,100 lb., good.....	9.52	9.67	10.00	10.48	10.525	9.85
Feeders, 800-1,100 lb., fair.....	8.50	8.93	9.00	—	9.50	9.05
Hogs (fed and watered), select.....	20.187	20.22	20.49	21.52	19.525	17.90
Hogs (fed and watered), heavies.....	17.50	19.00	19.50	—	19.25	16.85
Hogs (fed and watered), lights.....	18.975	19.25	19.41	20.39	19.1725	17.30
Hogs (fed and watered), sows.....	17.19	17.45	17.47	18.40	16.275	14.90
Hogs (fed and watered), stags.....	14.50	14.00	—	—	—	12.25
Lambs, good.....	16.166	—	—	9.00	—	13.375
Lambs, common.....	—	—	—	—	—	11.00
Sheep, heavy.....	11.00	—	—	—	—	8.50
Sheep, light.....	11.333	13.72	17.30	14.60	13.50	9.083
Sheep, common.....	10.50	—	—	—	—	—
Edmonton—						
Steers, heavy, finished.....	11.75	12.62	13.45	14.24	—	—
Steers, 1,000-1,200 lb., good.....	11.187	11.72	11.97	14.08	12.8125	10.50
Steers, 1,000-1,200 lb., common.....	9.12	10.06	10.31	11.43	11.125	9.4375
Steers, 700-1,000 lb., good.....	9.50	10.51	10.71	12.00	11.75	9.50
Steers, 700-1,000 lb., common.....	8.50	9.29	9.53	10.68	10.1666	8.875
Heifers, good.....	9.50	10.78	10.68	12.10	12.25	9.417
Heifers, fair.....	9.25	9.57	10.34	11.03	10.4	8.8125
Heifers, common.....	8.25	8.45	9.20	10.00	9.375	7.90
Cows, good.....	9.062	10.28	10.42	12.48	11.50	8.85
Cows, common.....	7.00	8.07	8.68	9.76	9.1666	7.00
Bulls, good.....	7.17	7.75	7.75	9.00	7.833	6.00
Bulls, common.....	6.12	6.75	6.42	7.25	7.125	4.75
Canners and Cutters.....	4.25	4.60	5.00	5.50	—	—
Oxen.....	—	9.30	8.44	—	—	—
Calves, veal.....	9.25	11.38	11.84	14.47	14.00	10.60
Calves, grass.....	—	—	—	—	—	—

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	February.	March.	April.	May.	June.	July.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Edmonton—con.						
Stockers, 450-800 lb., good.....	7-81	8-06	8-14	9-28	8-375	7-50
Stockers, 450-800 lb., fair.....	7-00	7-12	7-57	8-45	7-437	6-40
Feeders, 800-1,000 lb., good.....	9-00	—	—	10-93	10-375	9-175
Feeders, 800-1,000 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	18-912	19-89	19-94	21-20	19-3125	17-85
Hogs (fed and watered), heavies.....	18-50	18-46	18-99	20-25	18-312	16-813
Hogs (fed and watered), lights.....	15-912	16-62	16-83	18-15	17-0625	15-813
Hogs (fed and watered), sows.....	15-91	16-80	16-85	18-20	17-062	15-85
Hogs (fed and watered), stags.....	14-50	15-88	15-29	17-27	15-375	14-00
Lambs, good.....	13-50	15-81	17-00	—	—	13-00
Lambs, common.....	11-00	13-53	—	—	10-00	10-75
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	9-50	10-00	—	—	13-00	10-00
Sheep, common.....	8-50	8-83	—	—	—	8-25

VII. Average Prices of Milk in Principal Canadian Cities, 1919-20.

Description.		Halifax, N.S.	Montreal, P.Q.	Toronto, Ont.	Winnipeg, Man.	Vancouver, B.C.
Price Paid to Producers.		Cents per gallon.	Cents per gallon.	Per 8 gall. can.	Per cwt. ¹	Per lb. butter fat.
Winter.....	1919	40	35	\$ c. \$ c. 2 80	\$ c. 2 95	\$ c. 1 10
Spring and Summer.....	1919	40	30	2 25-2 55	2 95	1 00
Fall and Winter.....	1919-20	40	40	3 10	3 40	1 10
Spring and Summer.....	1920	40	31	2 35-2 70	Per 10 gals. ² 3-502	1 10
Wholesale Price to Hotels, Stores, etc.—		Cents per quart in cans.	Cents per quart in bots.	Cents per quart.	Cents per gallon.	Cents per gallon.
Winter.....	1919	13½	14	—	44	45
Spring and Summer.....	1919	13½	14	—	40	45
Fall and Winter.....	1919-20	13½	14	—	48	49
Spring and Summer.....	1920	13½	14	—	43-44	48
Retail Price per single Quart Cash—		Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.
Winter.....	1919	15	14	15	13	15
Spring and Summer.....	1919	15	13	14	13	15
Fall and Winter.....	1919-20	15	16	16	15	15
Spring and Summer.....	1920	15	14-16	15	15	15

¹Testing 3-6 p.c.²103 lb.

VIII. Average Prices of Live Stock at Chicago, U.S.A., 1920.

SOURCE: Market Reporter, U.S. Department of Agriculture.

Date.	HOGS.						CATTLE.				SHEEP.			
	Bulk of Sales.		Medium.		Light.		Beef Steers (choicest and prime.)		Heifers.	Veal Calves.	Calves.	Lambs.		Wethers.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	Medium Heavy.	Light Weight.	Common Choice.	Medium Choice.	Good Choice.	84 lb. down Medium prime.	Yearlings, Medium prime.	\$ c. \$ c.
1920.														
Jan. 6.	14 55-14 80	14 55-14 80	14 65-14 90	14 55-14 80	18 75-20 00	18 50-20 00	18 75-20 00	17 75-19 25	6 50-14 75	16 25-17 50	9 75-10 75	16 50-19 00	12 25-16 75	
" 13.	14 40-14 70	14 50-14 75	14 60-14 65	14 50-14 75	18 25-19 75	17 75-19 25	18 25-19 75	17 75-19 25	6 50-14 75	16 50-18 00	9 75-10 75	17 25-19 75	13 25-18 00	
" 20.	15 15-15 40	15 15-15 45	15 15-15 45	15 20-15 50	17 50-19 00	17 00-28 50	17 50-19 00	14 50-16 75	6 75-13 25	17 00-18 50	9 75-10 75	17 50-19 00	14 00-18 50	
Feb. 3.	15 60-15 75	15 50-15 75	15 50-15 75	15 50-15 85	15 50-17 50	14 50-16 75	15 50-17 50	14 10-16 65	6 85-13 75	17 50-19 25	9 75-10 75	17 25-21 35	15 75-19 75	
" 10.	15 00-15 30	15 00-15 30	15 00-15 30	15 00-15 40	15 00-17 00	13 75-16 50	15 00-17 00	13 75-16 50	6 65-13 25	17 50-19 00	9 50-11 00	17 25-20 00	15 00-18 50	
" 17.	14 40-15 10	14 50-15 00	14 50-15 00	14 50-15 20	15 00-17 00	13 75-16 50	14 75-16 85	14 00-16 50	6 60-12 50	15 75-17 25	9 50-11 00	18 50-21 00	15 00-19 00	
" 24.	13 75-14 25	14 00-14 50	13 85-14 35	14 15-14 50	13 75-16 00	12 85-15 60	13 75-16 00	12 85-15 60	6 40-13 00	15 75-17 25	9 50-11 00	18 00-21 25	15 00-19 00	
Mar. 2.	14 40-15 40	14 70-15 25	14 75-15 50	15 00-15 40	14 25-16 00	13 40-15 75	14 25-16 00	13 40-15 75	6 50-13 25	15 00-16 50	9 50-11 00	17 50-20 65	15 00-18 75	
" 9.	14 50-15 40	14 75-15 50	14 75-15 50	15 00-15 60	14 25-16 00	13 40-15 75	14 25-16 00	13 40-15 75	6 75-13 25	15 25-17 00	9 50-11 00	17 25-20 30	15 00-18 50	
" 16.	14 10-15 50	14 50-15 80	15 15-16 30	15 75-16 35	13 50-15 85	13 50-15 25	13 50-15 25	13 50-15 25	7 00-13 25	15 25-17 00	9 50-11 00	17 00-19 35	15 00-17 75	
" 23.	14 60-16 15	15 15-16 35	15 65-16 50	16 00-16 50	14 00-15 50	14 00-15 50	14 00-15 50	14 00-15 50	7 40-13 00	17 50-19 00	9 75-11 50	17 25-20 00	15 00-17 75	
April 6.	15 25-16 25	15 65-16 50	16 00-16 50	16 15-16 50	14 25-15 25	14 25-15 25	14 25-15 25	14 25-15 25	8 00-14 00	16 00-17 50	9 50-11 25	18 00-20 75	15 00-18 50	
" 13.	14 75-15 50	14 90-15 60	15 15-15 60	15 15-15 60	13 15-15 00	13 15-15 15	14 25-15 25	13 15-15 15	7 85-14 25	12 50-14 00	9 50-11 25	18 00-20 75	15 00-18 50	
" 20.	14 85-16 25	15 30-16 50	15 30-16 50	15 30-16 50	13 15-15 35	13 15-15 35	13 15-15 35	13 15-15 35	7 75-13 75	12 00-14 00	9 25-11 00	17 50-19 00	14 00-16 75	
" 27.	13 65-15 15	14 15-15 35	14 15-15 35	14 15-15 35	13 15-14 25	13 25-14 50	13 15-14 25	13 25-14 50	7 85-13 75	11 00-13 00	9 25-11 00	15 25-17 50	13 00-16 25	
May 4.	13 40-15 10	14 00-15 25	14 00-15 25	14 75-15 30	13 15-14 25	13 25-14 50	13 15-14 25	13 25-14 50	9 00-13 50	10 50-12 75	9 25-11 00	17 00-19 25	13 00-16 25	
" 11.	13 90-15 10	14 80-15 25	13 75-14 45	14 80-15 25	12 85-13 85	13 25-14 35	12 85-13 85	13 25-14 35	8 00-13 50	10 50-12 75	9 00-10 50	15 75-17 25	12 50-15 25	
" 18.	13 35-14 25	13 75-14 45	13 75-14 45	14 00-14 50	12 85-13 75	13 00-14 25	12 85-13 75	13 00-14 25	7 75-13 50	11 00-13 00	9 00-10 50	15 00-17 00	11 75-14 75	
" 25.	13 85-14 75	14 25-14 80	14 25-14 80	14 40-14 80	13 15-14 25	13 15-14 25	13 15-14 25	13 15-14 25	8 50-14 25	12 25-15 00	9 00-10 50	14 50-17 50	11 75-14 75	
June 1.	13 85-14 50	14 10-14 60	14 10-14 60	14 00-14 50	13 15-14 25	13 75-14 60	13 15-14 25	13 75-14 60	8 50-14 25	12 25-15 00	9 00-10 50	14 00-17 00	10 50-13 00	
" 8.	13 60-14 40	14 00-14 55	14 00-14 55	14 00-14 55	13 15-14 25	13 75-14 60	13 15-14 25	13 75-14 60	8 50-14 25	12 25-15 00	9 00-10 50	14 00-17 00	10 50-13 00	
" 15.	14 20-15 15	14 85-15 25	14 85-15 25	14 75-15 30	15 15-16 25	15 00-16 00	15 15-16 25	15 00-16 00	8 50-14 25	13 50-15 25	9 00-10 75	14 25-17 00	11 00-14 50	
" 22.	14 50-15 90	15 60-16 00	15 60-16 00	15 40-16 00	16 25-17 00	16 00-17 00	16 25-17 00	16 00-17 00	7 00-14 25	13 00-14 75	9 00-10 75	13 50-17 00	10 50-14 50	
" 29.	14 40-15 90	15 80-16 50	15 80-16 50	15 60-16 50	16 25-17 00	16 25-17 00	16 25-17 00	16 25-17 00	7 00-14 25	12 75-13 25	8 50-10 75	14 00-17 50	11 50-15 75	
July 6.	13 50-15 85	14 75-15 85	15 00-15 85	14 75-15 85	16 25-17 00	16 25-17 00	16 25-17 00	16 25-17 00	6 50-14 50	12 75-13 25	8 50-10 75	11 50-15 00	8 50-12 50	
" 13.	13 75-16 00	15 35-16 15	15 35-16 15	15 10-16 15	16 75-17 25	16 40-17 25	16 75-17 25	16 40-17 25	6 50-14 50	12 25-14 50	8 50-10 00	11 50-15 00	9 50-13 50	
" 20.	14 50-16 50	15 90-16 60	15 90-16 60	15 50-16 65	16 10-17 00	16 25-17 15	16 10-17 00	16 25-17 15	6 50-14 75	13 00-15 50	8 50-10 00	13 00-16 25	10 00-14 00	
" 27.	13 40-15 50	14 50-15 55	14 50-15 55	14 75-15 60	16 00-16 85	16 00-17 25	16 00-16 85	16 00-17 25	6 50-14 90	15 00-17 25	-	12 50-16 25	9 00-13 00	

IX. Wholesale Prices per lb. of Produce as on the 15th of Each Month, at Principal Markets, 1920.

Source: Dealers' quotations.

Description.	February.	March.	April.	May.	June.	July.
	cents.	cents.	cents.	cents.	cents.	cents.
Montreal—						
Hams, smoked—light, under 20 lb.....	38	37	39-41	42-43	45	48
Bacon, light under 12 lb.....	42	42	36-43	44-47	49	53
Barrelled Mess Pork.....	26	26	25	25	24	75
Beef, carcass fresh (No. 1) Butcher (good steers and heifers).....	23½	23½	22½	26½	27-27½	28½
Barrelled, Plate Beef.....	16½	16½	16½	15	15	16½
Lambs, yearlings.....	24-29	24-29	—	—	—	34
Sheep, good.....	20-22	20-22	21-22	23-24	27-29	24
Lard, tierces.....	33½	33	31½	30½	28½	38½-39½
Butter, creamery prints.....	64	61	63	58	58	60-61
Butter, creamery solids.....	63	60	62	57	57	59-60
Butter, Dairy prints.....	58	58	58	55	57	—
Eggs, fresh, select.....	75	74	52	55	—	60-64
Cheese, large, coloured, new.....	31	31	28	—	—	31
Toronto—						
Hams, smoked, light, under 20 lb.....	38	39	41	43	40	47
Bacon, light, under 12 lb.....	43	43	45	47	48-49	52
Barrelled Mess Pork.....	25½	25½	25½	27	27	27
Beef, carcass, fresh (No. 1) Butcher (good steers and heifers).....	23	22	24	25	26	28
Barrelled Plate Beef.....	17½	17½	17½	18½	18½	18½
Lambs, yearlings.....	30-32	32-34	—	—	32-24	28-30
Sheep, good.....	16-24	16-27	16-27	30	—	15-22
Lard, tierces.....	31½	29½	29	27½	29	29
Butter, creamery prints.....	68	65	66	64	57	60
Butter, creamery, solids No. 1.....	67½	64½	65½	63½	56½	59½
Butter, dairy prints.....	58	57	50	50	50	50
Eggs, fresh, specials.....	67	69	55	60	57	59
Cheese, large, coloured, new.....	31	29	29	34	32½	31
Winnipeg—						
Hams, smoked, light, under 20 lb.....	38-40	37-39½	44-46½	39½-41½	39-40½	46
Bacon, light, under 12 lb.....	45½	44½	49	46½	50	49½
Barrelled Mess Pork.....	22½	22½	25½	24½	25½	25½
Beef, carcass, fresh (No. 1) Butcher (good steers and heifers).....	15½-19½	17-20½	23-23½	20½-20½	28	21
Barrelled Plate Beef.....	18	18	—	—	—	—
Lard tierces.....	—	31	30	30½	28½	30
Butter, creamery prints.....	65	66	70	70	59	61
Butter, creamery solids.....	64	65	69	69	58	60
Butter, dairy prints.....	—	67	50	52	48	52
Eggs, fresh.....	—	—	56	—	50	57
Vancouver—						
Hams, smoked, light, under 20 lb.....	38-39	42-43	45-46	48-49	48-49	49-50
Bacon, light, under 12 lb.....	47	48	47	50	50	52
Barrelled Mess Pork.....	26	27	—	30	30	30
Beef carcass, fresh (No. 1) Butcher, (good steers and heifers).....	21	22-23	24-25	25-26	27	23½
Barrelled Plate Beef.....	16½	16½	17	18	18	—
Sheep, good.....	32	36	36	35	28	28
Lard, tierces.....	34	34	30	29½	29½	29½
Butter, creamery prints.....	71	69	74	69	61	62
Butter, creamery solids.....	70	68	73	68	60	58-60
Butter, dairy prints.....	—	42	42	52	51	51
Butter, dairy solids.....	—	41	41	51	51	50
Eggs, fresh, select.....	69	52	49	55	56	58
Cheese, large, new.....	32	31½	31	33	33	33

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1920

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DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. CHIEF, DIVISION OF AGRICULTURAL STATISTICS: ERNEST H. GODFREY, F.S.S. DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

FIELD CROPS OF CANADA.

Report for the month ended August 31, 1920.

The Dominion Bureau of Statistics issued to-day the following report on the yield and condition of field crops in Canada, as compiled from the returns of crop correspondents at the end of August.

PRELIMINARY ESTIMATE OF GRAIN YIELDS.

The first reports made by crop correspondents on the average yields per acre of wheat, oats, barley, rye and flaxseed show that, for the whole of Canada, the yields per acre are for spring wheat $16\frac{1}{2}$ bushels, as compared with $9\frac{1}{2}$ bushels last year, and with $16\frac{1}{2}$ bushels, the decennial average for the period 1910-19; for oats $37\frac{1}{4}$ bushels, compared with $26\frac{1}{4}$ bushels last year and $33\frac{1}{4}$ bushels, the ten-year average; for barley 27 bushels, compared with $21\frac{1}{4}$ bushels last year and $25\frac{3}{4}$ bushels, the ten-year average; for rye $17\frac{3}{4}$ bushels, compared with $13\frac{1}{2}$ bushels last year, and 16 bushels, the ten-year average; and for flaxseed $9\frac{1}{4}$ bushels, compared with 5 bushels last year, and 9.40 bushels the ten-year average. These figures indicate therefore that for wheat the yield is just equal to the decennial average; that for oats the yield is 4 bushels above average, that for barley it is $1\frac{1}{4}$ bushel above average and for rye it is $1\frac{3}{4}$ bushel above average; for flax the yield is practically equal to the average. Applying the averages for 1920 to the latest estimates of areas sown (these areas being shortly subject to final revision), we get as the preliminary estimate for the whole of Canada total yields as follows: Wheat 289,498,000 bushels, as against 193,260,400 bushels last year; oats 583,359,000 bushels, as against 394,387,000 bushels; barley 67,647,000 bushels, as against 56,389,400 bushels; rye 12,915,000 bushels, as against 10,207,400 bushels, and flaxseed 11,211,000 bushels, as against 5,472,800 bushels.

GRAIN YIELDS OF THE PRAIRIE PROVINCES.

The following is the preliminary estimate of total production in the three Prairie Provinces (Manitoba, Saskatchewan and Alberta), the corresponding totals for 1919 being given within brackets: Wheat 260,157,000 bushels (165,544,300), oats 359,289,000 bushels (235,580,000), barley 43,762,000 bushels (36,682,400), rye 9,820,000 bushels (7,262,400), and flaxseed 10,817,000 bushels (5,232,300). By provinces the estimated yields are: Manitoba, wheat 40,305,000 bushels (40,975,300); oats 61,328,000 bushels (57,698,000); barley 19,895,000 bushels (17,149,400); rye 4,349,000 bushels (4,089,400);

flaxseed 605,000 bushels (520,300). Saskatchewan, wheat 136,880,000 bushels (89,994,000); oats 173,003,000 bushels (112,157,000); barley 11,640,000 bushels (8,971,000); rye 3,535,000 bushels (2,000,000); flaxseed 9,288,000 bushels (4,490,000). Alberta, wheat 82,972,000 bushels (34,575,000); oats 124,958,000 bushels (65,725,000); barley 12,227,000 bushels (10,562,000); rye 1,936,000 bushels (1,173,000); flaxseed 924,000 bushels (222,000).

CONDITION OF LATE-SOWN FIELD AND FODDER CROPS.

The average condition on August 31 of late-sown field and fodder crops, expressed numerically in percentages of the average yield per acre for the ten years 1910-19, was reported as follows, the figures within brackets representing in the order given the condition on July 31, 1920, and on August 31, 1919: Peas 99 (102; 87); beans 99 (103; 93); buckwheat 101 (101; 95); mixed grains 105 (105; 87); corn for husking 101 (95; 89); potatoes 102 (104; 91); turnips, mangolds, etc. 98 (95; 99); fodder corn 102 (98; 97); sugar beets 101 (99; 83); pasture 95 (89 August 31, 1919).

Dominion Bureau of Statistics,
Ottawa, September 14, 1920.

ERNEST H. GODFREY,
Chief, Division of Agricultural Statistics.

I.—Preliminary Estimate of the Yields per acre of Cereal Crops in Canada, 1920, as compared with 1919 and the decennial average, 1910-19.

Field Crops.	Decennial average, 1910-19.	1919.	1920.	Per cent of 1919.	Per cent of average, 1910-19.
	bush. per acre.	bush. per acre.	bush. per acre.	p.c.	p.c.
Canada—					
Fall wheat.....	22.50	23.75	23.00	97	102
Spring wheat.....	16.50	9.50	16.50	174	100
All wheat.....	16.75	10.00	16.75	168	100
Oats.....	33.25	26.25	37.25	142	112
Barley.....	25.75	21.25	27.00	127	105
Rye.....	16.00	13.50	17.75	131	111
Flax.....	9.40	5.00	9.25	185	98
P. E. Island—					
Spring wheat.....	18.75	17.00	14.75	87	79
Oats.....	34.75	34.00	31.00	91	89
Barley.....	28.00	29.00	27.75	96	99
Nova Scotia—					
Spring wheat.....	20.00	19.50	21.25	109	106
Oats.....	32.50	36.00	34.00	94	105
Barley.....	28.25	31.25	28.25	90	100
Rye.....	20.25	29.50	15.00	51	74
New Brunswick—					
Spring wheat.....	18.00	17.50	19.00	109	106
Oats.....	29.25	30.25	33.50	111	115
Barley.....	25.75	26.75	25.25	94	98
Rye.....	20.25	20.00	15.00	75	75
Quebec—					
Spring wheat.....	16.50	16.75	17.75	106	107
Oats.....	26.75	26.75	31.25	117	117
Barley.....	23.00	22.75	25.50	112	111
Rye.....	15.50	17.25	16.00	93	103
Flax.....	10.50	9.75	10.25	105	98

I.—Preliminary Estimate of the Yields per acre of Cereal Crops in Canada, 1920, as compared with 1919 and the decennial average, 1910-19—con.

Field Crops.	Decennial average, 1910-19.	1919.	1920.	Per cent of 1919.	Per cent of average, 1910-19.
	bush. per acre.	bush. per acre.	bush. per acre.	p.c.	p.c.
Ontario—					
Fall wheat.....	22.75	24.30	23.00	95	101
Spring wheat.....	19.00	15.60	17.00	109	89
All wheat.....	22.25	21.20	21.50	102	97
Oats.....	34.75	29.30	45.75	156	132
Barley.....	29.50	23.10	35.00	152	119
Rye.....	17.00	15.80	18.25	116	107
Flax.....	13.25	9.40	13.25	141	100
Manitoba—					
Spring wheat.....	17.25	14.25	15.00	105	87
Oats.....	34.25	31.25	32.50	104	95
Barley.....	24.50	19.25	23.00	119	94
Rye.....	15.50	13.75	16.25	118	105
Flax.....	10.75	9.00	9.75	108	91
Saskatchewan—					
Spring wheat.....	16.00	8.50	14.50	171	91
Oats.....	33.25	23.10	33.75	146	102
Barley.....	23.75	8.20	24.25	296	102
Rye.....	13.25	10.50	17.50	167	132
Flax.....	9.30	4.80	9.00	188	97
Alberta—					
Fall wheat.....	20.75	15.75	24.60	156	119
Spring wheat.....	16.75	8.00	22.75	284	136
All wheat.....	17.00	8.00	22.75	284	134
Oats.....	36.25	23.75	43.00	181	119
Barley.....	25.50	25.50	29.25	115	115
Rye.....	19.25	14.00	22.00	157	114
Flax.....	9.10	2.75	11.00	400	121
British Columbia—					
Fall wheat.....	20.75	24.75	25.50	103	123
Spring wheat.....	16.75	22.00	25.50	116	152
All wheat.....	17.00	22.75	25.50	112	150
Oats.....	36.25	47.25	53.50	113	148
Barley.....	34.00	33.00	33.50	102	99
Rye.....	16.25	22.50	25.00	111	154

II.—Condition of Later Sown Field and Fodder Crops on August 31, 1920, as compared with August 31, 1917, 1918 and 1919, and with July 31, 1920.

NOTE.—100 = Average yield per acre, 1910-19.

Field Crops.	August 31 1917.	August 31 1918.	August 31 1919.	July 31 1920.	August 31 1920.
	p.c.	p.c.	p.c.	p.c.	p.c.
Canada—					
Peas.....	101	106	87	102	99
Beans.....	100	106	93	103	99
Buckwheat.....	105	91	95	101	101
Mixed grains.....	102	100	87	105	105
Corn for husking.....	89	89	89	95	101
Potatoes.....	94	95	91	104	102
Turnips, etc.....	101	95	99	95	98
Corn for fodder.....	96	96	97	98	102
Sugar beets.....	109	94	83	99	101
Pasture.....	107	87	89	96	95

II.—Condition of Later Sown Field and Fodder Crops on August 31, 1920, as compared with August 31, 1917, 1918 and 1919, and with July 31, 1920—con.

NOTE.—100 = Average yield per acre, 1910-19.

Field Crops.	August 31 1917.	August 31 1918.	August 31 1919.	July 31 1920.	August 31 1920.
P. E. Island—	p.c.	p.c.	p.c.	p.c.	p.c.
Peas.....	102	97	101	98	95
Buckwheat.....	103	98	101	95	99
Mixed grains.....	95	106	103	101	95
Potatoes.....	107	94	100	104	102
Turnips, etc.....	107	98	96	97	98
Corn for fodder.....	103	89	98	96	102
Pasture.....	107	98	102	94	89
Nova Scotia—					
Peas.....	97	97	99	98	96
Beans.....	102	86	96	97	98
Buckwheat.....	100	93	99	96	101
Mixed grains.....	96	105	102	97	99
Potatoes.....	100	102	99	101	103
Turnips, etc.....	103	97	100	96	94
Corn for fodder.....	103	97	98	98	102
Pasture.....	108	91	105	93	95
New Brunswick—					
Peas.....	102	95	97	100	98
Beans.....	104	88	99	95	93
Buckwheat.....	113	88	103	100	101
Mixed grains.....	93	100	102	99	100
Potatoes.....	81	96	101	95	99
Turnips, etc.....	104	96	99	94	95
Corn for fodder.....	95	89	101	94	100
Pasture.....	111	96	94	89	92
Quebec—					
Peas.....	97	100	91	103	103
Beans.....	96	93	97	101	100
Buckwheat.....	101	92	97	102	102
Mixed grains.....	95	104	100	105	106
Corn for husking.....	95	94	95	100	101
Potatoes.....	93	104	98	105	106
Turnips, etc.....	103	99	97	99	100
Corn for fodder.....	102	93	98	98	103
Pasture.....	97	98	96	97	97
Ontario—					
Peas.....	113	104	82	100	101
Beans.....	104	96	87	101	100
Buckwheat.....	110	93	89	94	100
Mixed grains.....	115	106	82	105	106
Corn for husking.....	83	83	87	97	101
Potatoes.....	110	90	76	104	107
Turnips, etc.....	113	94	80	98	100
Corn for fodder.....	92	93	93	97	102
Sugar beets.....	109	94	83	99	101
Pasture.....	116	89	86	98	97
Manitoba—					
Peas.....	—	—	—	94	91
Mixed grains.....	92	98	88	98	89
Potatoes.....	87	107	90	96	88
Turnips, etc.....	95	87	91	95	88
Corn for fodder.....	89	92	100	95	89
Pasture.....	76	90	93	93	89
Saskatchewan—					
Peas.....	93	80	93	108	88
Beans.....	92	80	95	100	100
Mixed grains.....	67	90	80	96	88
Potatoes.....	83	84	87	98	93
Turnips, etc.....	83	84	81	101	95
Corn for fodder.....	86	100	100	103	93
Pasture.....	79	80	66	88	98

II.—Condition of Later Sown Field and Fodder Crops on August 31, 1920, as compared with August 31, 1917, 1918 and 1919, and with July 31, 1920—con.

NOTE.—100=Average yield per acre, 1910-19.

Field Crops.	August 31 1917.	August 31 1918.	August 31 1919.	July 31 1920.	August 31 1920.
	p.c.	p.c.	p.c.	p.c.	p.c.
Alberta—					
Peas.....	104	58	99	104	100
Beans.....	—	—	103	100	90
Mixed grains.....	83	80	104	100	100
Potatoes.....	83	68	89	102	94
Turnips, etc.....	54	84	85	98	93
Corn for fodder.....	90	61	80	107	96
Pasture.....	88	71	78	106	96
British Columbia—					
Peas.....	95	87	91	101	96
Beans.....	—	—	88	98	94
Mixed grains.....	100	98	97	103	105
Potatoes.....	92	92	86	92	92
Turnips, etc.....	98	90	77	87	95
Corn for fodder.....	—	97	85	97	96
Pasture.....	8.	85	82	98	87

III. Forecast of Yield of Potatoes, as indicated by condition on August 31, 1920.

Province.	Average yield 1910-19.	Yield per acre 1919.	Con- dition August 31, 1920.	Indi- cated yield per acre. 1920.	Area sown 1920.	Yield 1919.	Forecast 1920.
	bush.	bush.	p.c.	bush.	acres.	000 bush.	000 bush.
Prince Edward Island	175.75	125.00	102	179.25	38,800	4,529	6,955
Nova Scotia.....	183.00	161.00	103	188.50	64,000	9,992	12,064
New Brunswick.....	176.25	142.75	99	174.50	78,000	10,790	13,611
Quebec.....	144.75	181.50	106	153.50	319,000	57,280	48,967
Ontario.....	114.75	96.30	107	122.75	154,500	15,145	18,965
Manitoba.....	150.00	126.00	88	132.00	40,900	5,288	5,399
Saskatchewan.....	148.25	170.00	93	137.75	62,800	11,250	8,651
Alberta.....	151.50	179.75	94	142.50	43,000	8,241	6,128
British Columbia.....	204.25	170.00	92	188.00	18,000	3,060	3,384
Canada.....	146.00	153.50	104	151.50	819,000	125,575	124,124

NOTE.—For condition, 100=average yield for ten years 1910-19.

CROP REPORTS FROM THE PROVINCES.

Prince Edward Island.—The early sown grain is in better condition than that sown later, as a week of close damp weather in the early part of August caused quite a bit of rust, especially on wheat. Most late sown wheat will yield a very poor crop. Late barley, however, is good. Carrots and turnips were injured by plant lice. Pastures were injured by the dry, hot weather of the earlier part of the summer, but recent rains have greatly improved their condition. In many districts all crops are reported to be in excellent condition.

Nova Scotia.—The outlook in general is excellent. Haying and harvest weather has, in most districts, been favourable, and practically all the hay and a great part of the grain is now successfully housed. Recent rains have also much improved the condition of root crops and of pastures, although some beans and a little grain show signs of rust owing to the damp weather. Oats have in many cases been seriously damaged by the army worm, and in a majority of districts turnips are almost totally destroyed by the turnip aphid. The potato crop indicates a large increase over last year.

New Brunswick.—The crops, after a very dry but fine summer, are, on the whole, fully up to average. Grain is good. Buckwheat is reported to be poor in some districts, but the crop, taken as a whole throughout the province, is expected to be above average. In a few cases the recent heavy rains have injured the grain already stooked. Pastures have suffered from the dry weather, and cattle prices are rather low. Turnips are below average owing to insect pests, but the "centenary" turnip has been found to be particularly satisfactory. Gardens are in good condition. Potatoes have in many cases been injured by blight, but a crop fully up to average is expected.

Quebec.—The harvesting of field crops, with few exceptions, is nearly finished, and is being accomplished under excellent conditions. The yield for grains, cereals and vegetables is considered by the farmers the best in years. Hay will be scarce; the growth was delayed by drought in the early part of the season. Pastures that were in very poor condition have improved lately. Grasshoppers did some damage to oats and pastures.

Ontario.—General conditions and prospects for good field crops, with the exception of spring wheat, are above the average. The harvest is nearly completed, and the weather has been very favourable. Spring wheat has been badly affected by rust, and wind and rain have flattened some small areas of oats. Pasture land is very poor, owing to drought in the early part of season, but the wet weather lately has improved it greatly. Hay is a light crop of good quality. Straw is abundant. Potatoes are a record crop in eastern Ontario; in other parts of the province there are reports of blight. Grasshoppers are numerous, but there is no mention of excessive damage.

Manitoba.—In spite of the excessively hot, dry weather of August, good yields are being realized. Cutting is generally completed and threshing has begun. The crop has suffered little injury, except for some rust in a few districts and the saw fly in others. Potatoes and vegetables were touched by frost in some localities. Rains on the 31st were welcomed for the later grains and for pasture.

Saskatchewan.—At the end of the month wheat cutting was nearly completed and threshing was commencing. The wheat yield is not quite so satisfactory as was anticipated a month ago, owing to the very dry, hot weather of August, but it is not far below the average, and the quality is said to be excellent. Rain on the last

days of the month interrupted harvesting operations, but improved late grains. In some few districts potatoes were damaged by frosts.

Alberta.—All crops are yielding well above the average. Wheat cutting was well advanced at the end of the month, and the grain appeared to be of good quality. Harvesting weather was favourable. Frosts on August 20 did some small damage in the north, while in the south heavy winds shelled a certain amount of wheat.

British Columbia.—The crops suffered during August from extreme heat and drought, except on irrigated lands. Good rains late in the month, however, have improved pastures and alfalfa. Fruit yields are only fair.

CROP REPORTS OF THE PROVINCIAL GOVERNMENTS.

Ontario.—The Department of Agriculture reports as follows: September 7: The past week has been favourable for harvesting and threshing, more especially as threshing in the stook is becoming more common. Considerable grain, however, is still lying in the fields awaiting time or help to get it into the barn. September 14: The marketing of grain is comparatively slow. Oats are threshing out surprisingly large yields in many parts of the province. Hay is selling at from \$25 to \$30 per ton. The late harvest, the dry and hard condition of the soil in many localities and fear of the Hessian fly is delaying some of the fall wheat sowing, and there is likely to be a shrinkage in the acreage.

Manitoba.—The Department of Agriculture reports (September 15) that although a small percentage of the crop remains uncut, especially in the more northerly districts, there are several places where the cutting is all completed. A considerable proportion of the uncut crop is flax, of which a comparatively large acreage has been sown this year. In most of the southern parts of the province threshing is fairly well advanced—in fact in a few places it is nearing completion; but as one goes northward progress is more delayed; and in some places the machines have not had a really satisfactory run yet. Probably about 30 p.c. of all Manitoba's threshing is done. In some spots part of the wheat is threshed, but none of the coarse grains. Reports as to yields vary from light to quite heavy, but taking it on the whole the outturn of grain is better than was expected prior to the harvest. The average of the estimates submitted by correspondents is about as follows: Wheat 17 bushels; oats 37; barley 24; flax 11; rye 17. It is the expectation of this Department that the final average on oats and flax will be a little lower than this figure, with barley slightly higher.

Saskatchewan.—The following telegrams have been received from the Department of Agriculture: August 23: Frost last week did no damage to wheat. Some late oats may be slightly damaged. Sixty p.c. wheat cut; oat cutting started. Average yield of wheat expected about 14 bushels per acre. Potatoes and garden produce damaged by frost. September 7: Harvesting practically completed.

Wet weather during past week delayed threshing, but expect it to be general this week. No damage reported by rain, except at two points where it is stated wheat is sprouting in the stook. Other reports state wheat yield and grade very satisfactory. On August 30 the Department's preliminary estimate of the yield of wheat was 14-30 bushels per acre.

Alberta.—The Department of Agriculture telegraphed as follows: September 17: Preliminary estimate of average yields per sown acre in bushels: Fall wheat 24; spring wheat 22; oats, 39; barley 31; rye 22; flax 11.

British Columbia.—The Department of Agriculture telegraphed (September 10) as follows: Crop conditions August 31, spring wheat 97; oats 101; barley 98; rye 96; peas $96\frac{1}{2}$; beans 97; buckwheat 100; mixed grains 102; grain hay 97; flax 100; corn for husking 95; potatoes $96\frac{1}{2}$; turnips 97; mangolds, carrots, etc. 99; hay and clover 92; alfalfa 98; corn for fodder $96\frac{1}{2}$; sugar beets 94; pasture 90. Estimated yields per acre: Spring wheat $25\frac{1}{2}$, rye 25, oats $53\frac{1}{2}$, barley $33\frac{1}{2}$ bushels. The figures expressing condition are in percentage of a standard.

TELEGRAPHIC CROP REPORTS.

The following telegrams on crop conditions throughout Canada at the end of August, received from the Provincial Departments of Agriculture and the Dominion Experimental Farms and Stations, were issued on September 2 by the Dominion Bureau of Statistics:

Prince Edward Island.—Prolonged hot weather early in August ripened all cereals very quickly, reducing yields, but favourable for saving balance of hay. Sufficient beneficial rains fell throughout month for corn, roots and potatoes. Some blight has been reported on potatoes, but crop prospects are good. Large fruit looking well. Pastures fair.

Nova Scotia.—**KENTVILLE:** Fine harvest weather during latter part of month. Fifty p.c. of grains now harvested in good condition. Yields are good of all cereals. Corn exceptionally good and root crops fair. Fall pastures are good. Potato blight in places, with yield fair to good. Apple crop about one million barrels, of good quality. **AMHERST:** Hay-making well advanced. Crop 80 p.c. of average. Weather catchy. Roots, ensilage and potatoes good. Grain ripening fast. Fruit light.

New Brunswick.—**FREDERICTON:** August weather favourable for crop growth and harvest. Moisture sprouted some grain in stook and started blight among potatoes. Haying about finished. Grain two-thirds cut, and will give high yields. From 30 to 40 p.c. of potatoes down with blight. Apples light crop.

Quebec.—**STE. ANNE DE LA POCAIERE:** August has been warmer than July, and cereals are ripening normally. Hay crop harvested in poor condition. This crop much deficient in the east. Twenty-five p.c. of cereals harvested. Potatoes give promise of a good crop, so will European plums. **LENNOXVILLE:** Weather during month generally fair, with exception of heavy rains from 13th to 15th and on the 22nd. More than half the grain crop already harvested. Yield very good. Corn crop fair. Potatoes are affected with rust. Swedes average crop. Vegetables good.

Ontario.—From the Ontario Department of Agriculture: Wet weather delayed harvesting. Oats and barley yield well with long straw. Spring wheat rather

poor. Fall wheat moderate yield, but grain plump and much of it overweight. Midsummer pastures good. Milk flow satisfactory. Second growth of clover, alfalfa, etc., good. Corn now growing promisingly. Potatoes and roots good.

Manitoba.—From the Manitoba Department of Agriculture: Grain cutting almost completed. Threshing over 50 p.c. done in the south. Starting in the north. Considerable rust on late crops in portions of the Red River valley, but many areas unaffected. August warm and very dry with little hail loss or frost damage. Crops vary from very heavy to very light. On the whole wheat, oats and barley will give slightly above average yields. Excellent seed wheat. Stem sawfly somewhat prevalent. Potatoes light. **MORDEN:** We have experienced one of the hottest and driest summers that southern Manitoba has had. Despite this the cereals are yielding fair crops of No. 1 grain. The straw is short. Potatoes a light crop of excellent quality. All sorts of garden products limited, with prices high. Pastures dead.

Saskatchewan.—From the Saskatchewan Department of Agriculture: Wheat cutting is practically completed. Threshing has started in many places. Rain general in the province Saturday and Sunday which will delay harvest operations. Preliminary average wheat yield for province estimated at 14 bushels per acre. **ROSTHERN:** Wheat cutting completed under favourable weather conditions, but threshing delayed by rain. Estimated wheat yield 10 bushels. Oats 50 p.c. cut, yield 30 bushels. Barley 50 p.c. cut, yield 20 bushels. No damage from hail or frost, but slight damage to late wheat from rust. **SCOTT:** No rain from 4th to 28th. Early sown crops matured rapidly; cutting commenced on the 23rd. 40 p.c. crop in stook at the end of month. Heavy rain last four days stopped harvesting operations. Three degrees frost on the 20th injured tender vegetation and caught some late wheat.

Alberta.—**LETHBRIDGE:** Weather conditions in August have been favourable for ripening and harvesting grain in southern Alberta. 75 p.c. wheat now cut and good start made on coarse grains. As yet insufficient grain threshed to make reliable estimate of yield. The feed situation good and consequently demand for hay not strong.

British Columbia.—From the British Columbia Department of Agriculture: Weather during August has been settled, with the exception of the last few days of the month, when rains were prevalent in practically all sections of the province. 60 p.c. of grain harvested and threshing is in progress at many points. Oats and wheat promise heavy yields. All root crops show great improvement and good yields are anticipated. **INVERMERE:** Crops are being harvested in good condition. Most of the grain is being cut. Alfalfa has made a good second growth. Corn and sunflowers are giving good yields. Potatoes and roots promise well. August has been exceptionally dry. **SUMMERLAND:** Apple and pear crop is sizing up well and is of excellent quality. Packing houses seem to anticipate an 80 p.c. crop, compared with last year. In this district hay crop not as heavy as average, but well harvested. **AGASSIZ:** Precipitation for August 1.67 inch. Excellent harvesting weather. Harvesting practically completed and about 25 p.c. threshing done. Yields below average. Pastures and roots require more moisture. **SIDNEY, V.I.:** Favourable weather for harvest. No damage done by rain. Threshing and straw baling active. Grain crops yielding well. Soil in good condition for ploughing. Orchard fruit, corn and roots developing satisfactorily.

STOCKS OF GRAIN IN CANADA ON AUGUST 31, 1920.

In Table I are given the results of the compilation of returns received from crop correspondents estimating the quantities of wheat, barley, oats, rye and flaxseed in the hands of farmers at the close of the Canadian crop year on August 31, 1920. The corresponding figures for wheat, barley and oats in the years 1918 and 1919 are included in the table.

I. Stocks of Grain in Farmers' Hands on August 31, 1918, August 30, 1919, and August 31, 1920.

Field Crops.	Total production in 1917.	In farmers' hands Aug. 31, 1918.		Total production in 1918.	In farmers' hands Aug. 30, 1919.		Total production in 1919.	In farmers' hands Aug. 31, 1920.	
	000 bush.	p.c.	bush.	000 bush.	p.c.	bush.	000 bush.	p.c.	bush.
Canada—									
Wheat.....	233,743	0-19	431,340	189,075	1-14	2,149,000	193,260,400	1-10	2,122,300
Barley.....	55,058	0-64	354,210	77,287	1-86	1,437,100	56,389,400	1-39	781,100
Oats.....	403,010	2-13	8,577,800	426,313	3-79	16,137,100	394,387,000	2-16	8,515,200
Rye.....	—	—	—	—	—	—	10,207,400	0-62	62,900
Flaxseed.....	—	—	—	—	—	—	5,472,800	1-45	79,200
P.E. Island—									
Wheat.....	522	0-85	4,400	606	4-55	27,600	624,600	4-92	30,700
Barley.....	100	0-10	110	162	0-83	1,300	164,000	0-75	1,200
Oats.....	6,482	1-64	106,300	5,839	0-15	8,800	6,038,000	2-75	166,000
Nova Scotia—									
Wheat.....	255	0-48	1,200	728	3-76	27,400	564,000	2-25	12,700
Barley.....	119	—	—	347	2-13	7,400	434,000	6-75	29,300
Oats.....	3,598	0-63	23,000	5,403	3-47	187,500	5,718,000	2-50	143,000
Rye.....	—	—	—	—	—	—	31,000	—	—
New Brunswick—									
Wheat.....	192	0-23	440	940	1-59	15,000	623,000	1-25	7,800
Barley.....	40	—	—	163	0-26	400	285,000	2-25	6,400
Oats.....	4,275	0-80	34,000	7,051	1-58	111,400	9,261,000	2-50	231,500
Rye.....	—	—	—	—	—	—	7,000	—	—
Quebec									
Wheat.....	3,884	0-70	27,200	6,308	2-09	131,800	4,206,000	1-32	55,500
Barley.....	3,064	0-20	6,100	4,551	1-29	59,000	5,344,000	5-25	280,600
Oats.....	32,466	1-30	422,000	52,667	3-22	1,696,000	57,275,000	2-57	1,472,000
Rye.....	—	—	—	—	—	—	578,000	0-64	3,700
Flaxseed.....	—	—	—	—	—	—	111,000	1-56	1,700
Ontario—									
Wheat.....	16,318	2-14	349,000	15,241	3-21	419,000	20,698,500	1-68	347,700
Barley.....	11,191	1-10	122,000	24,248	4-27	849,000	13,134,000	0-83	109,000
Oats.....	98,076	4-40	4,315,500	131,753	8-37	9,855,000	78,388,000	2-08	1,630,000
Rye.....	—	—	—	—	—	—	2,219,000	0-37	8,200
Flaxseed.....	—	—	—	—	—	—	129,500	1-14	1,500
Manitoba—									
Wheat.....	41,040	—	—	48,191	1-55	376,000	40,975,000	0-12	49,200
Barley.....	15,930	0-56	89,000	27,963	2-24	422,000	17,149,400	0-64	109,800
Oats.....	45,375	1-72	780,000	54,474	4-10	1,863,000	57,698,000	2-27	1,309,700
Rye.....	—	—	—	—	—	—	4,089,400	0-13	5,300
Flaxseed.....	—	—	—	—	—	—	520,300	0-25	1,300
Saskatchewan—									
Wheat.....	117,921	—	—	92,493	1-22	1,128,000	89,994,000	1-10	989,900
Barley.....	14,068	0-37	52,000	11,888	0-66	78,000	8,971,000	1-48	132,800
Oats.....	123,214	0-21	25,900	107,253	1-57	1,684,000	112,157,000	1-98	2,220,700
Rye.....	—	—	—	—	—	—	2,000,000	1-22	24,400
Flaxseed.....	—	—	—	—	—	—	4,490,000	1-62	72,700
Alberta—									
Wheat.....	52,992	0-69	36,600	23,752	0-05	24,000	34,575,000	1-81	625,800
Barley.....	10,386	0-82	85,000	7,756	0-26	20,000	10,562,000	1-06	112,000
Oats.....	86,289	3-25	2,804,000	60,323	1-21	730,000	65,725,000	2-03	1,334,200
Rye.....	—	—	—	—	—	—	1,173,000	1-82	21,300
Flaxseed.....	—	—	—	—	—	—	222,000	0-91	2,000
British Columbia—									
Wheat.....	619	2-02	12,500	816	0-04	200	1,000,000	0-30	3,000
Barley.....	161	—	—	209	—	—	346,000	—	—
Oats.....	3,236	2-10	67,600	1,550	0-09	1,400	2,127,000	0-38	8,100
Rye.....	—	—	—	—	—	—	110,000	—	—

Data as to stocks of grain in the elevators and in flour mills are now collected periodically by the Internal Trade Division of the Bureau, and the figures for the end of August, added to the estimates of grain in farmers' hands, are shown as in Table II. The figures for 1920 include stocks in unlicensed eastern elevators, and in flour mills, which were not previously ascertained. The totals represent actual quantities, except as regards stocks in farmers' hands, which are estimated from the returns of crop correspondents.

Account is not taken of grain in transit nor of grain in retail hands. Returns from a small number of unlicensed eastern elevators and flour mills had not been received when the table was made up.

II. Stocks of Grain in Canada at the close of the Crop Years, 1918, 1919 and 1920.

Quantities in	Wheat.			Barley.		
	Aug. 31, 1918.	Aug. 30, 1919.	Aug. 31, 1920.	Aug. 31, 1918.	Aug. 30, 1919.	Aug. 31, 1920.
	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' hands.....	431,340	2,149,000	2,122,300	354,210	1,437,100	781,100
Terminal elevators.....	16,878	433,920	1,603,811	460,560	244,566	171,703
Public elevators.....	3,120,215	2,108,884	4,316,527	434,479	1,388,502	337,301
Eastern elevators.....	—	—	30,007	—	—	326
Country elevators.....	414,591	762,362	980,000	204,241	273,225	210,000
Flour Mills.....	—	—	237,780	—	—	2,000
Total.....	3,983,024	5,454,166	9,290,425	1,453,490	3,345,393	1,502,430

Quantities in	Oats.			Rye.		Flax.	
	Aug. 31, 1918.	Aug. 30, 1919.	Aug. 31, 1920.	Aug. 30, 1919.	Aug. 31, 1920.	Aug. 30, 1919.	Aug. 31, 1920.
	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' hands.....	8,577,800	16,137,100	8,515,200	—	62,900	—	79,200
Terminal elevators.....	3,063,667	1,371,043	339,829	152,209	58,209	37,610	466,086
Public elevators.....	2,901,296	1,036,555	240,100	—	—	—	21,629
Eastern elevators.....	—	—	10,942	—	308	—	1,208
Country elevators.....	426,627	735,258	560,000	6,642	—	15,047	48,000
Flour mills.....	—	—	14,846	—	355	—	—
Total.....	14,969,390	19,279,956	9,680,917	158,851	121,772	52,657	616,123

NOTE.—For 1920, the quantities in terminal elevators were for August 27.

According to Table II, about 9,291,000 bushels of wheat, 1,503,000 bushels of barley, 9,681,000 bushels of oats, 122,000 bushels of rye and 616,000 bushels of flaxseed constitute the "carry over" into the new crop year running from September 1, 1920, to August 31, 1921.

INFLUENCE OF THE WEATHER UPON THE GROWTH OF SPRING WHEAT.

Table I on pages 242-243 continues by provinces and districts the record of observations collected from crop correspondents as to the influence of the weather upon the growth of spring wheat. The observations during August relate to the dates (1) when heading was general; (2) of flowering stage; (3) of milk stage; (4) of first cutting; (5) when cutting was general, and (6) of completion of cutting.

Table II gives, by provinces, the same information as compared with the corresponding periods of 1919. This table shows that although growth was earlier last year, this year it was more rapid. Also the harvest was earlier last year, as 517 records of the completion of cutting during August were made in 1919, as against 396 this year.

I. Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1920.

Province and District.	Heading General.				Flowering Stage.				Milk-stage.						
	No. of replies.	Aug. 1-7.	Aug. 8-14.	Aug. 15-21.	Aug. 22-31.	No. of replies.	Aug. 1-7.	Aug. 8-14.	Aug. 15-21.	Aug. 22-31.	No. of replies.	Aug. 1-7.	Aug. 8-14.	Aug. 15-21.	Aug. 22-31.
Prince Edward Island.....	1	-	1	-	-	5	3	1	1	-	8	4	2	1	1
Nova Scotia.....	4	4	-	-	-	8	4	-	1	-	16	3	5	8	-
New Brunswick.....	3	3	-	-	-	3	1	2	-	-	6	2	2	2	-
Quebec—															
North of St. Lawrence.....	3	1	2	-	-	7	3	2	2	-	17	5	6	5	1
South of St. Lawrence.....	2	2	-	-	-	6	4	2	-	-	19	4	7	8	-
Eastern Townships.....	1	-	1	-	-	3	1	1	1	-	9	1	4	4	-
Montreal Counties.....	1	-	1	-	-	1	-	1	-	-	2	-	1	1	-
Ontario—															
Eastern.....	2	2	-	-	-	4	2	2	-	-	6	4	1	2	-
Central.....	3	2	1	-	-	2	1	1	-	-	8	4	2	-	-
Western.....	-	-	-	-	-	-	-	-	-	-	4	4	-	-	-
Southern.....	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-
Northern.....	1	-	1	-	-	1	1	-	-	-	4	-	2	1	1
Manitoba—															
Eastern.....	-	-	-	-	-	1	1	-	-	-	2	1	-	1	-
North Central.....	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
South Central.....	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
North Western.....	1	1	-	-	-	1	-	1	-	-	12	9	1	2	-
South Western.....	-	-	-	-	-	-	-	-	-	-	3	3	-	-	-
Saskatchewan—															
North.....	1	1	-	-	-	1	-	1	-	-	22	14	6	2	-
South.....	-	-	-	-	-	1	-	-	-	-	12	11	-	1	-
Alberta—															
North.....	-	-	-	-	-	4	2	1	1	-	17	6	5	4	2
South.....	-	-	-	-	-	1	1	-	-	-	4	3	1	-	-
British Columbia.....	1	1	-	-	-	2	1	1	-	-	6	4	-	2	-

Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1920—concluded.

Province and District.	First Cutting.					Cutting General.					Cutting Completed.				
	No. of replies.	Aug. 1-7.	Aug. 8-14.	Aug. 15-21.	Aug. 22-31.	No. of replies.	Aug. 1-7.	Aug. 8-14.	Aug. 15-21.	Aug. 22-31.	No. of replies.	Aug. 1-7.	Aug. 8-14.	Aug. 15-21.	Aug. 22-31.
Prince Edward Island	26	-	-	16	10	28	-	-	2	26	6	-	-	-	6
Nova Scotia.....	58	1	-	25	32	47	-	1	1	45	14	-	-	1	13
New Brunswick.....	21	-	-	9	12	13	-	-	2	11	3	-	-	-	3
Quebec—															
North of St. Lawrence.....	49	2	8	30	9	44	-	4	10	30	18	-	-	4	14
South of St. Lawrence.....	39	4	4	14	17	32	-	1	7	24	7	-	-	-	7
Eastern Townships.....	39	1	8	19	11	29	-	-	12	17	13	-	-	-	13
Montreal Counties.....	25	6	6	12	1	30	2	2	17	9	19	-	1	3	15
Ontario—															
Eastern.....	21	6	8	7	-	26	1	7	17	1	28	-	1	13	14
Central.....	39	10	14	12	3	42	6	9	19	8	42	3	5	19	15
Western.....	28	6	9	11	2	27	2	7	11	7	23	-	4	8	11
Southern.....	11	5	5	1	-	9	-	4	5	-	10	1	2	4	3
Northern.....	24	2	8	9	5	23	-	5	10	8	21	-	-	5	16
Manitoba—															
Eastern.....	20	10	8	2	-	21	4	11	5	1	21	-	-	9	12
North Central.....	19	7	10	2	-	20	9	10	1	1	17	-	-	4	13
South Central.....	19	15	4	-	-	20	5	13	2	18	24	-	-	6	18
North Western.....	52	12	25	15	-	53	1	19	26	7	38	-	-	3	35
South Western.....	24	13	10	1	-	29	6	17	5	1	24	-	-	8	16
Saskatchewan—															
North.....	85	4	33	40	8	81	-	6	41	34	22	-	-	-	22
South.....	54	8	23	23	-	56	1	16	28	11	30	-	-	1	29
Alberta—															
North.....	47	2	10	15	20	40	-	1	12	27	5	-	-	-	5
South.....	14	3	4	6	1	15	-	2	6	7	6	-	-	-	6
British Columbia.....	9	1	4	4	-	10	-	1	4	5	5	-	-	-	5

II. Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1919 and 1920.

A. DATES OF HEADING GENERAL.

Items.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of heading.....	6	1	25	4	3	3	15	7	4	6
Aug. 1-7.....	5	-	14	4	2	3	12	3	3	4
Aug. 8-14.....	-	1	5	-	1	-	1	4	1	2
Aug. 15-21.....	1	-	5	-	-	-	2	-	-	-
Aug. 22-31.....	-	-	1	-	-	-	-	-	-	-

Items.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of heading.....	-	1	-	1	-	-	-	1	53	24
Aug. 1-7.....	-	1	-	1	-	-	-	1	36	17
Aug. 8-14.....	-	-	-	-	-	-	-	-	8	-
Aug. 15-21.....	-	-	-	-	-	-	-	-	8	-
Aug. 22-31.....	-	-	-	-	-	-	-	-	1	-

B. DATES OF FLOWERING STAGE.

Items.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of flowering.....	6	5	24	8	10	3	37	17	7	7
Aug. 1-7.....	1	3	6	4	5	1	16	8	5	4
Aug. 8-14.....	4	1	11	3	2	2	18	6	1	3
Aug. 15-21.....	1	1	6	1	3	-	2	3	1	-
Aug. 22-31.....	-	-	1	-	-	-	1	-	-	-

Items.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of flowering.....	1	2	-	2	3	5	-	2	88	51
Aug. 1-7.....	1	1	-	-	3	3	-	1	37	25
Aug. 8-14.....	-	1	-	2	-	1	-	1	36	20
Aug. 15-21.....	-	-	-	-	-	1	-	-	13	6
Aug. 22-31.....	-	-	-	-	-	-	-	-	2	-

C. DATES OF MILK-STAGE.

Items.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of milk-stage.....	8	8	35	16	12	6	62	47	19	24
Aug. 1-7.....	-	4	2	3	-	2	15	19	9	14
Aug. 8-14.....	1	2	3	5	6	2	13	18	7	5
Aug. 15-21.....	6	1	23	8	4	2	30	18	3	4
Aug. 22-31.....	1	1	7	-	2	-	4	1	-	1

II. Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1919 and 1920—continued.

C. DATES OF MILK-STAGE.—concluded.

Items.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of milk-stage.....	2	19	1	34	11	21	2	6	152	181
Aug. 1-7.....	2	15	1	25	2	9	1	4	32	86
Aug. 8-14.....	—	1	—	6	6	6	—	—	36	45
Aug. 15-21.....	—	3	—	3	3	4	1	2	70	45
Aug. 22-31.....	—	—	—	—	—	2	—	—	14	5

D. DATES OF FIRST CUTTING.

Items.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of first cutting.....	11	26	37	58	22	21	141	152	124	123
Aug. 1-7.....	1	—	—	1	—	—	7	13	53	29
Aug. 8-14.....	—	—	—	—	2	—	22	26	39	44
Aug. 15-21.....	—	16	8	25	3	9	63	75	30	40
Aug. 22-31.....	10	10	29	32	17	12	49	38	2	10

Items.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of first cutting.....	65	134	72	139	56	61	9	9	537	723
Aug. 1-7.....	49	57	47	12	9	5	3	1	169	118
Aug. 8-14.....	12	57	15	56	18	14	1	4	109	201
Aug. 15-21.....	4	20	10	63	22	21	2	4	142	273
Aug. 22-31.....	—	—	—	8	7	21	3	—	117	131

E. DATES OF CUTTING GENERAL.

Items.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting general.....	2	28	12	47	11	13	110	135	152	127
Aug. 1-7.....	—	—	—	—	—	—	—	2	37	9
Aug. 8-14.....	—	—	—	1	—	—	3	7	43	32
Aug. 15-21.....	1	2	1	1	2	2	26	46	60	62
Aug. 22-31.....	1	26	11	45	9	11	81	80	12	24

Items.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting general.....	135	143	114	137	52	55	8	10	586	695
Aug. 1-7.....	86	16	42	1	3	—	2	—	170	28
Aug. 8-14.....	30	69	44	22	5	3	1	1	126	135
Aug. 15-21.....	14	48	21	69	28	18	2	4	145	252
Aug. 22-31.....	5	10	7	45	16	34	3	5	145	280

II. Dates of Heading, Flowering, Milk-stage and Cutting of Spring Wheat, 1919 and 1920—concluded.

F. DATES OF CUTTING COMPLETED.

Items.	P.E.I.		N.S.		N.B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting completed.....	—	6	1	14	2	3	42	57	163	124
Aug. 1-7.....	—	—	—	—	—	—	—	—	16	4
Aug. 8-14.....	—	—	—	—	—	—	—	1	36	12
Aug. 15-21.....	—	—	—	1	—	—	3	7	52	49
Aug. 22-31.....	—	6	1	13	2	3	39	49	59	59

Items.	Man.		Sask.		Alberta.		B.C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting completed.....	168	124	102	52	35	11	4	5	517	396
Aug. 1-7.....	2	—	4	—	—	—	1	—	23	4
Aug. 8-14.....	28	—	5	—	4	—	1	—	74	13
Aug. 15-21.....	75	30	36	1	5	—	—	—	171	88
Aug. 22-31.....	63	94	57	51	26	11	2	5	249	291

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The weather during August has been a little warmer and finer than usual for this month. The highest temperature recorded is 93·5, the lowest 47·6 and the mean temperature is 58·23; while for the corresponding period of 1919 the maximum was 91·6, the minimum 41·9 and the mean 66·53. The rainfall totals 2·81 inches, recorded on ten different days,—as compared with 1·41 inch a year ago, when showers were experienced on fourteen days, and an average of 3·16 inches from 1911 to 1919. The bright sunshine averages 8·19 hours a day, as against 6·80 hours a day for August of last year.

The threshing of the Experimental Farm field grain was completed on August 28th, an area of 97 acres of oats yielding at the rate of approximately 72 bushels to the acre. Potatoes are a heavy crop, and roots are making favourable progress. Indian corn is looking better, and the yield promises to be fair. The second crops of clover and alfalfa are about ready to cut, and should give a return about one ton to the acre.

The contract was awarded recently for the erection of a new Office Building for the Poultry Division at the Central Farm, and for the past few weeks the actual construction of the same has been actively under way.

Charlottetown, P.E.I.—J. A. Clark, Superintendent, reports:—“The first week in August was warm and dry, with the exception of a heavy rain on the night of the 2nd and the morning of the 3rd. The second week was the hottest period of the year, the temperature

reaching 91 on the 9th. The dry spell continued until the 11th, when there came six days of damp weather. The remainder of the month has been fine, and very favourable for harvesting, except for a very heavy rain on the 23rd. The prevailing warm weather has ripened all cereals very quickly, and the yields will not be quite up to earlier expectations. Conditions, however, have been excellent for saving the balance of the hay crop. The rains during the month have supplied sufficient moisture for corn, roots and potatoes. Some blight has been reported on potatoes, but the crop prospects are favourable. Large fruits are looking well, and the pastures are very good. Almost all of the harvest in the neighbourhood of the Station was cut before the close of the month. The straw is lighter than last year, but the grain is threshing out a little better than usual. During the month a very successful Ayrshire Breeders' picnic was held at the Station, and an excellent programme was carried out."

Kentville, N.S.—W. S. BLAIR, Superintendent, reports:—"The weather during August has been warmer than usual,—the mean temperature being 67·95, compared with an average mean of 64·07 for the corresponding period from 1914 to 1919. The rainfall, recorded on twelve different days, totals 3·58 inches, of which 1·35 inch was registered on the 23rd; while the August precipitation of the six previous years averaged 2·66 inches. The bright sunshine aggregates 207·2 hours, against an average of 204·3 hours from 1914 to 1919. From the 4th to the 11th, conditions were ideal for haying, affording those late in getting in their hay an ideal opportunity of saving it. Except for the heavy rainfall on the 23rd, fine weather has prevailed from the 15th to the 31st of the month, and there has been a good opportunity for the harvesting of cereals, and, at the Experimental Station, all of this work has been finished, and, in the district, probably 60 p.c. of it. All grains are yielding high—probably about 15 p.c. more than in an average year. The warm weather has matured ensilage corn of excellent quality. At the close of the month, unsprayed potatoes are showing evidences of blight."

Nappan, N.S.—W. W. BAIRD, Superintendent, reports:—"The weather during August has been a little warmer than usual, the mean temperature being 66·02, compared with an average mean of 63·04 for the period from 1913 to 1919. There has been a little less bright sunshine and more precipitation than usual. The precipitation, recorded on eleven different days, totals 5·70 inches, which is much more than usual, the August average of the seven previous years being only 2·98 inches. The rainfall has been very beneficial to practically all crops, and, although some hay was damaged by a wet spell of five days towards the middle of the month, hay-making has made rapid progress, and, at the end of the month, most of the hay, which is estimated to be 80 p.c. of an average crop, has been saved. Corn and sunflowers and early grains promise well, also early roots; but late roots have suffered from aphides. Potatoes are free from

blight and promise a heavy yield. Apples are a light crop, but the fruit is of good quality and there is a brisk demand for it. At the Experimental Farm, the seed, after recleaning, from an acre planted to turnip stocklings, weighs 1,255 lb."

Fredericton, N.B.—W. W. HUBBARD, Superintendent, reports:—"The temperatures recorded during August range higher than usual, the mean for the month being 68.6, as compared with an average mean of 63.6 for the corresponding period during the previous forty-six years. The hours of bright sunshine total a little less than usual, while the precipitation has been about normal. All crops have made good growth, but there have been warm, misty days, which have been favourable to the development of such diseases as apple scab and the potato blight, and only by thorough and persistent spraying has it been possible to combat these troubles. A good many potato fields have suffered severely from late blight, and it is feared that the result will be a much lighter crop than had been expected. Live stock has done fairly well this summer, but it is probable that the high prices of hay and feeding stuffs generally will lead to a diminished number being kept during the approaching winter."

Ste. Anne de la Pocatière, Que.—JOS. BEGIN, Superintendent, reports:—"The weather during August has been warmer and drier than usual, the mean temperature for the month being 61.7 and the precipitation totalling 1.87 inch, while a year ago the mean was 58.1 and the rainfall 3.68 inches. The bright sunshine averages 8.82 hours a day, compared with 6.14 hours for the corresponding period of 1919. At the Experimental Station, haying was finished early in the month. The hay has been saved in good condition; but the yield is rather light, running a little less than 80 p.c. of the average for the last five years. As regards grain, although the straw is short, the prospects are for about an average crop at the Station; but, throughout the district, the drought has had a pronounced effect during the last part of the month, with the result that the return is likely to be a little below what had been expected. Indian corn and roots have made rather slow progress, and, unless conditions should prove to be exceptionally favourable during September, are likely to yield considerably less than usual. Tree fruits are a good crop. Potatoes promise well."

Cap Rouge, Que.—G. A. LANGEIER, Superintendent, reports:—"The weather during August has been warmer, drier and brighter than the average for the corresponding period during the past eight years, the figures being, respectively, 67.23 and 63.09 for the mean temperature, 3.31 and 4.47 inches for the precipitation and 254.8 and 201.5 hours for the sunshine. In this district, the grain crop, which is now being harvested, promises to give very good yields. During the month the Cap Rouge Station exhibited at the Three Rivers Exhibition, and also at the Quebec District Fair, French-

Canadian horses, forage crops, cereals, vegetables, fruits and flowers, carrying off very many prizes, which, in the class for French-Canadian horses, greatly exceeded the number awarded to all other exhibitors combined."

Lennoxville, Que.—J. A. McCLARY, Superintendent, reports:—"On the whole, the weather during August has been fine and warm. The highest temperature registered is 88 and the lowest 40 and the mean temperature of the month is 68·59; while, a year ago, the extremes were 83 and 35, respectively, and the mean 62·19. Although rain has been recorded only on six days, the precipitation totals 4·70 inches, as compared with 3·59 inches for this time in 1919. The bright sunshine aggregates 229·7 hours, as against 196·8 hours for the corresponding period of last year. In this district, a large percentage of the grain has been harvested, but very little of it has yet been threshed. Potatoes are suffering from blight. Corn and roots are looking well. This Station had an exhibit at the Ayer's Cliff Fair from August 25th to 27th; on the 28th, it was transferred to the Great Eastern Exhibition at Sherbrooke, where it is attracting much attention, especially the display of chickens and water fowl."

Brandon, Man.—W. C. McKILLICAN, Superintendent, reports:—"The weather during August has been warm and, except for the closing days, dry. Grain ripened quickly, and cutting, which commenced during the first week of the month, was completed before its close. Most of the farmers of this district have made at least a start at threshing, and some now have it well advanced. At the Experimental Farm, another day's effort should complete this work. The rainfall of the month totals 4·34 inches, nearly all of it recorded on the 29th, 30th and 31st. This wet spell has interrupted threshing, which is not likely to be resumed for at least a week. Grain is turning out a light crop, although rather better than the straw would indicate. Corn, of which an increased acreage has been sown, is an excellent crop."

Indian Head, Sask.—N. D. MACKENZIE, Superintendent, reports:—"The weather during August has been favourable, with the exception of the 19th and 20th, when a frost cut back all tender plants, resulting in decreasing the yield of corn by at least one-third and causing a loss of three grades in the case of wheat which had not fully matured. In this district, 90 p.c. of grain cutting, excepting oats, is completed at the end of the month. Wheat and barley promise average yields, but oats are likely to give only 80 p.c. of a normal crop. Roots promise well, and potatoes about an average crop."

Rosthern, Sask.—WM. A. MUNRO, Superintendent, reports:—"As a result of the rains of late July, the grain crops in this district revived sufficiently, early in August, to bring them up to a better condition than they have been for the past three years. All the

wheat, except that which was late sown, has matured in splendid condition, but the late sown fields suffered slightly from rust. This is the first season sunflowers have been grown at the Experimental Station, and, judging by present indications, this crop should greatly help in solving the feed problem in this part of Saskatchewan. At the Station, there has been erected a silo, 14 ft. by 28 ft., in order to try out sunflower ensilage."

Scott, Sask.—M. J. TINLINE, Superintendent, reports:—"The August mean temperature is 63.5—which, with the exception of 1915, is the highest on record here for this period. No rain fell from the 4th to the 28th. Harvesting became general about the 23rd, and, by the 31st, approximately 40 p.c. of the crop has been cut. Heavy rains during the last four days of the month have interrupted harvesting operations. Three degrees of frost, on the 20th, injured tender vegetation and caught some late wheat. At the Station, Western Rye Grass seed and field peas have been threshed, the former yielding 62 bushels, and the latter, 22½ bushels, to the acre."

Lacombe, Alberta.—B. C. MILNE, Assistant to the Superintendent, reports:—"Without doubt the present is the driest season experienced here for a number of years. During each of the months of June and July, only an inch and one-half of rain fell, and that in such small showers that no particular good could be noticed. This period of drought, followed by only slightly over one inch of precipitation in August, has been rather trying on crops. While the straw is short, very good yields of grain will be harvested here, and, over the greater portion of central Alberta, the crops are somewhat better than the average. Yields in the Lacombe district should be about twenty bushels per acre in the case of wheat, twenty-five bushels for barley, and thirty-five bushels per acre for oats. Where live stock is confined within limited pasture areas, the grass is very short, and supplementary feeds are being used. Stock on range has done very well, there being plenty of pasture available."

Lethbridge, Alberta.—W. H. FAIRFIELD, Superintendent, reports:—"The rainfall recorded at this Station during August amounts to only 0.20 of an inch, which is but one-tenth of the normal precipitation for this period. Notwithstanding the drought, the wheat appears to have filled fairly well, and, except in the extreme eastern part, grain crops are going to be fair in southern Alberta. On August 31st, about 75 p.c. of the wheat has been cut, and a good start has been made on the coarse grains, while quite a little rye has been threshed, and the threshing of wheat has been begun in a few isolated cases. The second cutting of alfalfa on irrigated land is yielding well. The grass on the ranges has made very fair growth during the summer and, as a result of the dry August, has cured well and promises to make excellent winter pasture. No serious damage has been reported from grasshoppers."

Invermere, B.C.—R. G. NEWTON, Acting Superintendent, reports:—"The mean temperature of the past month is 61.2, which is about normal for August, but the precipitation is the lowest on record, only reaching 0.38 of an inch. An exceptionally strong gale occurred throughout the night of the 16th-17th, but it brought no immediate rainfall to the district. The crops are being harvested in good condition. Most of the grain has been cut. The second crop of alfalfa, which has still to be harvested, has made good growth. Corn and sunflowers are giving good yields, while potatoes and roots promise well."

Summerland, B.C.—R. H. HELMER, Superintendent, reports:—"The weather turned very cold on August 24, but it has warmed up again towards the end of the month. The silos at this Station were filled with sunflower silage on the 27th and 28th, and corn is now ready to go in. Hay has been harvested in good condition. The fruit crop, although not so heavy as last year, is of excellent quality."

Agassiz, B.C.—W. H. HICKS, Superintendent, reports:—"August has been very dry and hot. Only two light showers of rain fell previous to the 27th; on this date, a three-day rain commenced, which brought the total precipitation for the month up to 1.67 inch. These weather conditions have been excellent for harvesting. More precipitation and cooler weather early in the month would have lengthened the ripening period and thus helped to increase yields. At the close of the month, the cereal crops are all practically harvested, and about one-fourth of the threshing is done. The threshing on the Experimental Farm is completed. The grain yields are below the average. Pasture and root crops require more moisture. The demand for dairy and poultry products is good. Eggs are selling for 71 cents a dozen."

Sidney, Vancouver Island, B.C.—LIONEL STEVENSON, Superintendent, reports:—"The weather conditions during August have been favourable for the ripening and harvesting of cereals. Fifty per cent of the grain was in stook or stack by the 20th. Threshing commenced on the 18th, but was held up for a few days, owing to rains during the last week of the month. Yields of grain, where threshed, are satisfactory. The unusually heavy rains have made ploughing and early seeding possible. Vegetable seed crops ripened well and have been gathered in good condition. Orchard fruits were too far advanced to be benefited by the rains. Pears are of medium size and yielding well. Plums are a light crop with many varieties; a heavy drop was experienced during the dry weather. Apples are light and only of medium size. Although pastures are very short, live stock is in good condition; but supplementary feeding is necessary for milk production. Young poultry have developed well and are in good demand. ~~Meat~~ Feeds continue scarce and correspondingly high priced."

Meteorological Record for August, 1920.

The records of temperature, precipitation and sunshine at the Experimental Farms and Stations for the month of August are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature F.			Precipitation in inches.	Hours of Sunshine.	
	Highest.	Lowest.	Mean.		Possible.	Actual.
Ottawa, Ont.....	93.50	47.60	69.26	2.81	436	254.1
Charlottetown, P.E.I.....	91.00	46.00	68.31	3.56	436	226.2
Kentville, N.S.....	91.00	42.00	67.95	3.58	435	207.2
Nappan, N.S.....	87.00	39.00	66.02	5.70	437	205.3
Fredericton, N.B.....	93.00	43.00	68.60	3.74	437	206.5
Ste. Anne de la Pocatière, Que.....	88.20	37.60	61.70	1.87	440	273.9
Cap Rouge, Que.....	89.00	44.20	67.23	3.31	437	254.8
Lennoxville, Que.....	88.00	40.00	68.59	4.70	436	229.7
Brandon, Man.....	98.00	31.00	64.80	4.34	447	275.1
Indian Head, Sask.....	95.00	30.00	64.48	1.42	448	265.7
Rosthern, Sask.....	92.40	31.20	64.53	1.67	446	277.5
Scott, Sask.....	91.00	29.20	63.50	2.37	446	281.2
Lacombe, Alberta.....	91.90	29.00	59.65	0.38	455	263.7
Lethbridge, Alberta.....	92.50	36.50	64.10	0.20	446	329.4
Invermere, B.C.....	90.00	35.00	61.20	0.38	449	259.0
Summerland, B.C.....	98.00	44.00	71.03	0.18	447	294.0
Agassiz, B.C.....	92.00	43.00	66.72	1.67	445	220.7
Sidney, Vancouver I., B.C.....	86.50	42.00	63.60	2.52	444	322.5

Ottawa, September 18th, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Ministry of Agriculture reports (September 1) that the first half of August was cold and wet in most parts of the country, but conditions were better, although the cold persisted during the latter part of the month. Crops therefore ripened slowly, and harvesting generally is late. The grain crops are better in the eastern half of the country, where the weather conditions were more favourable, and on the whole they may there be regarded as almost average, whereas in the west they are decidedly below. Wheat is best in the southeast, Essex especially being over average. Barley is in most parts, but not everywhere, the best of the cereals, the best reports coming from the northeast. Oats, on the other hand, are the poorest of the three, although winter oats are satisfactory. Beans are better than the cereals and a heavy crop generally; peas are more variable, being good in the midlands, but poor in the southwest, and on the whole will be about average. Prospects for potatoes have decidedly fallen off during the month, and the crop is likely to be below average. There is a certain amount of disease in most parts of the country, more than last year; but the progress of the disease was generally checked towards the end of the month. It is most prevalent in the southwest, where the yield is

expected to be very poor. Summarising the returns, and expressing an average crop by 100, the appearance of the crops indicated probable yields per acre as shown by the following percentages: Wheat 95, barley 98; oats 94; beans 102; peas 99; potatoes 92; turnips and swedes 96; mangolds 90; seeds' hay 104; meadow hay 106; hops 110.

Scotland.—The Board of Agriculture reports (September 1) that the weather during the first fortnight of August was very unsettled throughout the greater part of Scotland; rain was frequent and heavy, and as a result the completion of the hay harvest was delayed in most districts. The wheat crop is healthy and vigorous in most cases, but owing to the lack of sunshine and warmth it is maturing slowly, and in southwest Forfar many fields are still green. As a whole the prospects of the barley crop are very satisfactory, and the yield is expected to be at least a full average. The total yield of oats is expected to be somewhat below the normal.

United States.—The Crop-Reporting Board of the U.S. Department of Agriculture issued (September 8) estimates of the yield of the principal field crops as follows:

Crops.	Area.	Per cent of 1919.	Yield per acre.			Yield in millions of bushels.			
			1919.	1920. ¹	Average 1914-1918.	1919.	August forecast 1920. ¹	Sept. forecast 1920. ¹	Average 1914-1918.
	000 acres.	p.c.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Winter wheat.....	19,487	83.5	14.7	15.6 ²	15.6	732	533 ²	533 ²	563
Spring wheat.....	19,487	83.5	9.0	12.2	12.7	209	262	237	259
All wheat.....	53,652	73.3	12.8	14.4	14.6	941	795	770	822
Corn.....	103,648	101.5	28.6	30.2	26.1	2,917	3,003	3,131	2,760
Oats.....	41,032	96.8	29.4	35.1	32.1	1,248	1,402	1,442	1,415
Barley.....	7,437	100.2	22.3	26.2	25.1	166	196	195	215
Rye.....	5,470	77.4	12.5	14.2	15.5	89	78	78	60
Buckwheat.....	752	95.2	20.6	20.6	17.8	16	15	16	15
White potatoes.....	3,849	95.9	89.2	107.3	95.2	358	402	413	382
Sweet potatoes.....	1,022	99.3	100.7	99.6	94.8	104	101	102	75
Flax.....	1,706	101.4	5.3	6.9	7.5	8.9	14.3	11.8	12.9
Hay (all).....	72.830	101.1	1.62 lb.	1.55 ¹ lb.	1.53 lb.	91 lb.	89 lb.	88 ² lb.	81 lb.
Tobacco.....	1,860	97.8	730.8	835.5	813.6	1,389	1,544	1,554	1,188

¹Interpreted from condition reports. ²Preliminary estimate.

The condition of spring wheat on September 1, 1920, or at the time of harvest, was 64.1 p.c. of the normal, as compared with 48.5 p.c. last year and 69.9 p.c., the ten year average. Corn is 86.4 p.c., as compared with 80 p.c. last year and 74.2 p.c., the average; oats are 88.3 p.c., as compared with 73.1 p.c. last year and 80.7 p.c., the average; barley is 82.5 p.c., as compared with 69.2 p.c. last year and 77.6 p.c., the average. Of other crops the condition on September 1, 1920, as compared with last year and the average, was as follows:

Buckwheat 91·1, against 90·1 and 85·1; white potatoes 84·3, against 69·5 and 74; sweet potatoes 86·8, against 86 and 82·7; tobacco 84·6, against 71·8 and 78·1; flax 63·8, against 50·5 and 69·6; rice 88·3, against 91·9 and 86·9; sugar beets 93, against 79 and 88·5. The total yield of wheat is estimated at 770 million bushels, as against 941 million bushels in 1919 and 822 million bushels, the average for the years 1914-18. The yield of corn is estimated at 3,131,000,000 bushels, as compared with 2,917,000,000 bushels in 1919 and 2,760,000,000 bushels, the five year average. Oats yield 1,442,000,000 bushels, as against 1,248,000,000 bushels in 1919 and 1,415,000,000 bushels, the average.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

The following table, showing the estimated production of wheat, rye, barley and oats in countries of the northern hemisphere, is compiled from the August issue of the "International Crop Report and Agricultural Statistics". Later estimates for the United States are given in this issue on page 253.

Estimated Production of Wheat, Rye, Barley and Oats in Countries of the Northern Hemisphere, 1920, compared with 1919 and Average of the Years 1914-18.

Countries.	1919.	1920.	Per cent of 1919.	Five-year average 1914-18.	Per cent of average, 1914-18.
	000 bush.	000 bush.	p.c.	000 bush.	p.c.
Wheat—					
Belgium.....	9,895	9,050	91·5	7,935	114·0
Spain.....	129,251	134,457	104·0	137,221	98·0
Finland.....	306	276	90·1	231	119·4
Italy.....	146,975	169,771	86·6	167,991	87·5
Switzerland.....	3,524	3,586	101·8	4,205	85·3
United States (winter).....	731,648	533,009	72·9	562,037	94·8
United States (spring).....	209,355	262,004	125·1	259,214	101·1
Guatemala.....	252	312	124·1	632	49·4
British India.....	280,485	376,880	134·4	352,837	106·8
Algeria.....	19,166	13,902	72·5	33,191	41·9
Egypt.....	30,137	27,246	90·4	34,186	79·7
Tunis.....	6,981	4,766	68·3	7,047	67·6
Total.....	1,567,975	1,535,259	97·9	1,566,727	98·0
Rye—					
Belgium.....	13,681	16,113	117·8	11,092	145·3
Spain.....	23,297	32,053	137·6	26,696	120·1
Finland.....	10,505	8,681	82·6	9,137	95·0
Italy.....	4,571	4,724	103·4	4,931	95·8
Switzerland.....	1,575	1,622	103·0	1,676	96·8
United States.....	88,477	77,999	88·2	59,933	130·1
Total.....	142,106	141,192	99·4	113,465	124·4

Estimated Production of Wheat, Rye, Barley and Oats in Countries of the Northern Hemisphere, 1920, compared with 1919 and Average of the Years 1914-18—con.

Countries.	1919.	1920.	Per cent of 1919.	Five-year average, 1914-18.	Per cent of average, 1914-18.
	000 bush.	000 bush.	p.c.	000 bush.	p.c.
Barley—					
Spain.....	81,809	89,146	109.0	82,071	108.6
Finland.....	5,295	5,535	104.5	4,522	122.4
Italy.....	8,327	5,971	71.7	9,037	66.1
Switzerland.....	625	620	99.3	617	100.4
United States.....	165,715	195,996	118.3	214,815	91.2
Algeria.....	25,538	13,857	54.3	40,108	34.5
Egypt.....	10,087	7,475	74.1	12,296	60.8
Tunis.....	5,512	3,169	57.5	7,918	40.0
Total.....	302,908	321,769	106.2	371,384	86.6
Oats—					
Spain.....	30,979	37,294	120.4	30,847	120.9
Finland.....	22,714	25,969	114.3	23,053	113.5
Italy.....	32,654	35,388	77.4	30,793	82.1
Switzerland.....	2,607	2,931	112.4	4,575	64.1
United States.....	1,174,883	1,319,333	112.3	1,331,352	99.1
Algeria.....	10,008	4,863	48.6	14,595	33.5
Tunis.....	2,918	1,427	48.9	3,046	46.8
Total.....	1,276,763	1,427,205	111.8	1,438,161	99.2

YIELD OF PRINCIPAL CEREALS.

The estimated production of Hungary for 1920 is 343,921,000 bushels of wheat, 18,279,000 bushels of rye, 21,743,000 bushels of barley and 23,151,000 bushels of oats. The production of barley in Belgium is estimated at 4,331,000 bushels in 1920, as against 3,617,000 bushels in 1919, and in Morocco at 30,777,000 bushels, as against 32,143,000 bushels, the five-year average. The production of oats in Belgium is estimated at 28,550,000 bushels, as against 25,337,000 bushels in 1919, an increase of 12.7 p.c.

The table shows that the yield of wheat in 1920 for the 11 countries named is 1,535,259,000 bushels, as compared with 1,567,975,000 bushels in 1919 and with 1,566,727,000 bushels, the annual average for the five years 1914-18. The yield of 1920 is therefore 2.1 p.c. less than that of 1919 for the same countries and 2 p.c. less than the average of the five years. Rye gives the total of 141,192,000 bushels in six countries, as compared with 142,106,000 bushels in 1919 and 113,465,000 bushels, the five-year average, the percentage proportions being 0.6 p.c. less, as compared with 1919 and 24.4 p.c. more, as compared with the five-year average. Barley for eight countries yields 321,769,000 bushels in 1920, as against 302,908,000 bushels in 1919 and 371,384,000 bushels, the five-year average, the yield of 1920 being 6.2 p.c. more than in 1919 and 13.4 below the average. The total production of oats in seven countries is 1,427,205,000 bushels, as compared with 1,276,763,000 bushels in 1919 and with

1,438,161,000 bushels, the five-year average. The yield of 1920 is 11·8 p.c. above that of 1919 and 0·8 p.c. below that of the five-year average.

CONDITION OF CROPS IN EUROPEAN COUNTRIES.

Ireland.—An abnormally wet and cold July had not very seriously injured cereal crops, but warmth and sun were much needed to ensure average crops. Potatoes, though looking well, were suffering from July rains and cold. Warm weather was needed to increase the yield.

Germany.—The weather in July was generally favourable to crops. Cutting of spring crops began at the end of July, and the yield appears to be rather less than expected. Crop conditions on August 1, 1920, were reported as follows: Winter wheat 2·6 (2·6); spring wheat 2·6 (3·0); winter rye 2·9 (2·6); spring rye 2·9 (2·9); barley 2·7 (2·8); oats 2·8 (2·8); potatoes 2·7 (2·7). In the scale adopted, 2 = good and 3 = average. The figures within brackets are those of August 1, 1919.

Bulgaria.—Throughout June the weather was propitious, the rainfall being 50 p.c. above the average. Judging from appearances the year's crops will give a better result in grain, but less straw than in 1919.

Denmark.—The condition of crops on August 1, 1920, expressed in percentage of the decennial average, was as follows, last year's condition at the same date being given in brackets: Wheat 112 (109); rye 112 (91); barley 111 (102); oats 105 (98); potatoes 105 (99).

France.—On August 1 the harvest generally speaking was well advanced. Inclement weather during July had resulted in many crops being laid, especially in the west and north. Barley is as a rule favourably mentioned, and oats, with very few exceptions, are expected to yield well.

Italy.—The threshing of cereal crops is proceeding under most favourable weather conditions. Maize and potato prospects are average in northern Italy, but have suffered much from drought in the south.

Luxemburg.—The condition on July 1, 1920, was: Winter wheat 2·2, spring wheat 2·7, rye 2·1, barley 3, oats 3·1, potatoes 2·1. (Scale 2 = good, 3 = average).

Netherlands.—In June and early July, the weather was favourable for growth. The condition in percentage of the decennial average was on July 19, 1920, as follows, the figures for July 19, 1919, being given within brackets: Wheat 116 (103), rye 110 (100), barley 104 (92), potatoes 114 (97), oats 109 (81).

Poland.—The weather was favourable, and on July 1, 1920, the condition of spring sown wheat was average; potatoes were good.

Portugal.—Torrential rains and floods have caused much injury to the maize crop in the northern districts. Potatoes have suffered from peronospora.

Switzerland.—Crop conditions are less promising than they were. In many places the cereal crops have been laid and potatoes injured by the recent torrents of rain. The yield of grain is very doubtful.

Czecho-Slovakia.—On July 1, 1920, crop conditions were average for spring wheat, good for winter wheat, poor for rye. The weather was favourable, but had been dry at the beginning of June and then cold and wet. On July 1, 1920, the condition of the potato crop was good.

Tunis.—Dry weather in July has been favourable for the growth of maize.

CROPS IN SOUTHERN HEMISPHERE.

Union of South Africa.—The area under wheat for the season 1920-21 is 823,000 acres, as compared with 800,500 acres in 1919-20 and an average of 841,000 acres during the five years 1914-15 to 1918-19, or 102.8 and 97.9 p.c. of the two last mentioned areas respectively. The area under barley is 91,000 acres, against 98,900 last year, and an average of 94,600 acres during the previous four years 1915-16 to 1918-19, or 92.0 and 96.1 p.c. of the two last mentioned areas respectively. The area under oats is 564,000 acres, against 558,100 last year, and 485,872, the average of the previous four years 1915-16 to 1918-19, or 101.0 and 116.1 p.c. of the two last mentioned areas respectively.

Australia.—A cable dated August 17 stated that crop conditions are good and the weather favourable for wheat. The area under wheat is estimated at 11,500,000 acres, as compared with 7,413,200 in 1919-20 and an average of 10,399,000 acres during the five years 1914-15 to 1918-19, or 155.1 p.c. and 110.6 p.c. of the two last mentioned areas respectively.

LIVE STOCK STATISTICS.

France.—The number of farm animals in France on December 31, 1919, was as follows, the figures for December 31, 1918, being given within brackets: Horses 2,413,190 (2,232,930); asses 203,100 (311,890); mules 167,180 (139,070); cattle 12,373,660 (12,250,820); pigs 4,080,560 (4,377,020); sheep 8,990,990 (9,061,110); goats 1,166,770 (1,197,490).

Bessarabia.—The number of farm animals in Bessarabia in 1919, as compared with 1918 in brackets is reported as follows: Horses 402,679 (416,608); asses 299; cattle 654,881 (549,569); sheep 1,593,925 (1,434,587); goats 15,714 (15,496); pigs 345,778 (400,337); buffaloes 8,077.

Canadian Wheat.—Broomhall's Corn Trade News of August 31, 1920, contains the following: "For several reasons a good crop in Canada is of the greatest importance to European countries, which have to buy overseas wheat. For one thing, it will furnish the only serious competition that U.S. sellers will have to face for several

months. In addition to its very useful rôle as an active competitor for the trade of importing countries, the Canadian crop is largely relied upon by our millers for their supply of strong wheat. We greatly hope that the Canadian crop will fulfil the highest expectations both as to quality and quantity."

AGRICULTURAL RETURNS OF BRITISH COLUMBIA, 1920.

On August 24, the Dominion Bureau of Statistics received from the British Columbia Department of Agriculture the results of the compilation of this year's returns of the areas sown in the province to field crops and of the numbers of farm live stock in June, 1920. The annual Agricultural returns of British Columbia have been collected jointly by the Dominion Bureau of Statistics and the Provincial Department of Agriculture since 1917, the schedules being printed and mailed direct to the farmers by the Dominion Bureau and the returns being mailed to Victoria and there compiled by the Provincial Department of Agriculture. This year the cards mailed totalled 15,804, of which 1,309 were returned for various causes through the Dead Letter Office, leaving 14,495 as the effective number of farmers. The returns actually compiled numbered 8,694, representing 60 per cent of the total and leaving 40 per cent as the number subject to estimate on the basis of the returns received. The number of returns received this year from British Columbia, viz., 8,694, is larger than in any of the three previous years, comparing with 7,970 in 1919, 6,534 in 1918 and 6,886 in 1917. The proportion of the total is also the highest, being 60 per cent. as against 58 per cent. in 1919, 42½ per cent. in 1918 and 46 per cent. in 1917.

Table I shows the acreage under field crops in British Columbia for the year 1920, as compared with 1919, and table II the numbers of farm live stock for the same two years.

I. Areas sown to Field Crops in British Columbia, 1919 and 1920.

Crop.	1919.	1920.	Crop.	1919.	1920.
	acres.	acres.		acres.	acres.
Fall Wheat.....	12,699	13,762	Potatoes.....	18,000	17,780
Spring Wheat.....	31,202	32,453	Turnips, etc.....	7,387	7,403
All Wheat.....	43,901	46,215	Fodder corn.....	4,368	4,713
Oats.....	45,021	47,992	Hay and clover.....	126,251	127,017
Barley.....	10,497	9,646	Wild Hay.....	40,528	39,573
Flax.....	857	801	Grain Hay.....	60,390	60,612
Rye.....	4,911	5,367	Alfalfa.....	13,331	13,478
Peas.....	2,251	2,657	Pasture range.....	850,234	847,720
Beans.....	1,677	1,615	Pasture seeded.....	61,220	61,942
Buckwheat.....	317	277	Other crops.....	8,754	8,489
Mixed grains.....	4,017	4,893	Truck garden.....	6,348	5,456
Corn for husking.....	857	1,008	Fallow.....	17,845	16,662
Other grains.....	4,911	3,205			

II. Numbers of Live Stock in British Columbia, 1919 and 1920.

CLASSIFICATION.—Horses: Stallions, Mares and Geldings, 2 years old and over. Colts and fillies, under 2 years. Cattle: Bulls for breeding. Cows, 2 years old and over.

Description.	1919.	1920.	Description.	1919.	1920.
	No.	No.		No.	No.
Horses—			Dairy cattle—		
Stallions.....	828	825	Bulls for breeding....	2,480	2,569
Mares.....	18,734	18,841	Milch cows.....	51,594	53,974
Geldings.....	17,154	17,728	Yearlings.....	17,880	17,795
Colts and fillies....	7,001	6,676	Calves.....	16,737	16,681
Total horses.....	43,717	44,070	All other.....	4,477	3,797
			Total dairy cattle..	93,168	94,816
Mules.....	580	580	Total cattle.....	246,238	249,588
Beef cattle—			Sheep.....	44,985	46,473
Bulls for breeding..	1,677	1,693	Swine.....	44,960	44,101
Cows.....	80,034	79,520	Turkeys.....	7,717	7,858
Yearlings.....	29,734	30,320	Ducks.....	21,977	22,363
Calves.....	24,854	25,704	Fowls.....	443,491	465,944
All other.....	16,771	17,535	Chicks.....	694,874	831,655
Total beef cattle...	153,070	154,772	Geese.....	11,962	12,262
			Rabbits.....	83,050	82,146

The principal figures in both of these tables will be included in the returns for the whole of Canada, upon completion of the work of compiling the returns from the other provinces.

THE WEATHER DURING AUGUST.

The Dominion Meteorological Office reports that the mean temperature was normal or slightly below over the northern districts of British Columbia and Alberta and in a few sections near Lake Huron in Ontario, while in other parts of the Dominion it was above, the positive departures ranging from three to five degrees in southern Alberta and Manitoba and from three to four degrees in eastern Ontario, western Quebec and some localities in the Maritime Provinces. The rainfall was above the normal in British Columbia, northern Saskatchewan, the greater part of Quebec and the Maritime Provinces, and in a few localities in Ontario; elsewhere it was below the average. In many places in Ontario the total fall was less than two inches and in southern Alberta less than one inch.

Record Price for Pig.—According to a letter in the British Live Stock Journal of August 27, 1920, Mr. T. H. Hooley, of Dry Drayton, Cambridgeshire, claims to hold the world's record price for an individual pig, his Large Black "Drayton Best of All 33,910" having realized 700 guineas (\$3,577) by public auction in April last. At the Dalmeny sale a sow and litter of ten pigs realized 720 guineas (\$3,679).

PRICES OF AGRICULTURAL PRODUCE, 1920.

I. Weekly Range of Cash Prices per Bushel of Canadian Grain at Winnipeg and Fort William, 1920.

SOURCE: Board of Grain Commissioners for Canada.

For Wheat the quotations are Fixed Prices to August 15, with Participation Certificates of the Canadian Wheat Board.

Grain and Grade.	Aug. 7.		Aug. 14.		Aug. 21.		Aug. 28.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
No. 1 Nor.....	2 15	—	2 15	—	2 69½—2 74	2 70½—2 79½		
No. 2 Nor.....	2 12	—	2 12	—	2 66½—2 71	2 67½—2 76½		
No. 3 Nor.....	2 08	—	2 08	—	2 62½—2 67	2 63½—2 72½		
No. 4 Special.....	2 02	—	2 02	—	2 52	2 46½—2 58½		
No. 5 Special.....	1 91	—	1 91	—	2 42	2 36½—2 47½		
No. 6 Special.....	1 81	—	1 81	—	2 32	2 26½—2 30½		
Feed.....	1 71	—	1 71	—	2 22	2 16½—2 20½		
Oats—								
No. 2 C.W.....	0 91½—0 96½		0 94½—1 04½		0 95½—0 97½	0 96½—0 97½		
No. 3 C.W.....	0 92—0 93½		0 92½—1 01½		0 93½—0 95½	0 93½—0 94½		
No. 1 feed extra.....	0 90½—0 92½		0 92½—0 96½		0 93½—0 94½	0 93½—0 94½		
No. 1 feed.....	0 88½—0 89½		0 88½—0 97½		0 89½—0 91½	0 88½—0 89½		
No. 2 feed.....	0 86½—0 87½		0 86½—0 94½		0 85½—0 88½	0 84½—0 85½		
Barley—								
No. 3 C.W.....	1 37½—1 43½		1 43½—1 46		1 41½—1 45½	1 29½—1 39		
No. 4 C.W.....	1 27½—1 33½		1 33½—1 36½		1 33½—1 36½	1 24½—1 33		
Rejected.....	1 02½—1 10½		1 11½—1 18		1 14½—1 18½	1 11½—1 17		
Feed.....	1 02½—1 10½		1 11½—1 18		1 14½—1 18½	1 11½—1 17		
Flax.....								
No. 1 N.W.C.....	3 45—3 53½		3 49—3 57½		3 47½—3 53½	3 41½—3 50		
No. 2 C.W.....	3 39—3 47½		3 43—3 51½		3 40½—3 47½	3 35½—3 44		
No. 3 C.W.....	2 88—2 98½		2 94—3 07½		2 96½—3 03½	3 06—3 14		
Rye—								
No. 2 C.W.....	1 75—1 85		1 75—1 98		1 94—2 02½	1 97—2 05½		

II.—Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1920.

(SOURCE: Monthly Crop Report of the U.S. Department of Agriculture.)

Grain and Market.	May.		June.		July.		August.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red, Winter, No. 2—								
St. Louis.....	2 83—3 12		2 75—2 99		2 24—2 91	2 22—2 62		
Chicago.....	2 83—3 15		2 75—3 00		2 29—2 85	2 22—2 62½		
New York (f.o.b.) afloat.....	3 10—3 38		3 05—3 20		2 58—3 25	2 50—2 89		
Corn, No. 2, mixed—								
St. Louis.....	1 85—2 13		1 77—2 00		1 49—1 78	1 44—1 73		
Corn No. 2—								
Chicago.....	1 87—2 17		1 76—2 01½		1 40—1 83½	1 40—1 49		
Oats, No. 2—								
St. Louis.....	1 03½—1 17		1 07½—1 22		0 70—1 12½	0 69—0 70		
Chicago.....	1 00½—1 17½		1 07—1 29		0 72—1 06	0 68—0 88½		
Rye, No. 2—								
Chicago.....	1 98—2 29		2 13—2 41		1 71—2 35½	1 70—2 10		

III. Range of Prices of Imported Grain and Flour at British Markets, 1920.

SOURCE: For Mark Lane, London, "The Mark Lane Express", for Liverpool, "Broomhall's Corn Trade News".

Mark Lane.	August 2.		August 9.		August 16.		August 23.		August 30.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—										
Canadian No. 1.....	2 79 ³ / ₄	—	2 82 ³ / ₄	—	2 85 ³ / ₄	—	2 85 ³ / ₄	—	2 85 ³ / ₄	—
“ No. 2.....	2 76 ¹ / ₄	—	2 79 ¹ / ₄	—	2 82 ¹ / ₄	—	2 82 ¹ / ₄	—	2 82 ¹ / ₄	—
“ No. 3.....	2 72 ¹ / ₄	—	2 74 ¹ / ₄	—	2 78 ¹ / ₄	—	2 78 ¹ / ₄	—	2 78 ¹ / ₄	—
“ No. 4.....	2 67 ³ / ₄	—	2 70 ³ / ₄	—	2 73 ³ / ₄	—	2 73 ³ / ₄	—	2 73 ³ / ₄	—
American spring.....	2 76 ³ / ₄	—	2 79 ³ / ₄	—	2 82 ³ / ₄	—	2 82 ³ / ₄	—	2 82 ³ / ₄	—
“ hard winter.....	2 79 ³ / ₄	—	2 82 ³ / ₄	—	2 85 ³ / ₄	—	2 85 ³ / ₄	—	2 85 ³ / ₄	—
“ red No. 2.....	2 73 ³ / ₄	—	2 76 ³ / ₄	—	2 79 ³ / ₄	—	2 79 ³ / ₄	—	2 79 ³ / ₄	—
Australian.....	2 88 ¹ / ₄	—	2 91 ¹ / ₄	—	2 94	—	3 00	—	3 00	—
Argentine.....	2 82 ³ / ₄	—	2 85 ³ / ₄	—	2 88 ¹ / ₄	—	2 91 ¹ / ₄	—	2 91 ¹ / ₄	—
Oats—										
Canadian.....	1 62 ⁷ / ₈ —1 65 ¹ / ₂		1 62 ⁷ / ₈ —1 65 ¹ / ₂		1 62 ⁷ / ₈ —1 65 ¹ / ₂		1 62 ⁷ / ₈ —1 65 ¹ / ₂		1 62 ⁷ / ₈ —1 65 ¹ / ₂	
American.....	1 57 ³ / ₄ —1 60 ¹ / ₂		1 57 ³ / ₄ —1 60 ¹ / ₂		1 57 ³ / ₄ —1 60 ¹ / ₂		1 57 ³ / ₄ —1 60 ¹ / ₂		1 57 ³ / ₄ —1 60 ¹ / ₂	
Argentine.....	1 52 ¹ / ₂ —1 55 ¹ / ₈		1 52 ¹ / ₂ —1 55 ¹ / ₈		1 52 ¹ / ₂ —1 55 ¹ / ₈		1 57 ³ / ₄ —1 62 ⁷ / ₈		1 52 ¹ / ₂ —1 55 ¹ / ₈	
Flour—										
Canadian spring.....	16 00	—	16 00	—	16 00	—	16 00	—	16 00	—
American “.....	16 00	—	16 00	—	16 00	—	16 00	—	16 00	—
“ winter.....	16 00	—	16 00	—	16 00	—	16 00	—	16 00	—
Australian.....	16 00	—	16 00	—	16 00	—	16 00	—	16 00	—

Liverpool.

August 4-31.

Wheat—	\$ c.
Nor. Man. No. 1.....	3 01 ³ / ₄
“ No. 2.....	2 98 ³ / ₄
“ No. 3.....	2 95 ³ / ₄
Red winter No. 2.....	2 95 ³ / ₄
Hard “ No. 2.....	2 98 ³ / ₄
Australian.....	3 04 ³ / ₄

IV. Average Prices of British grown Grain, 1920.

SOURCE: "London Gazette," published pursuant to s. 8 of the Corn Returns Act, 1882.

Week ended—	Wheat.		Barley.		Oats.	
	per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
August 7.....	s. d. 85 10	\$ c. 2·611	s. d. 85 3	\$ c. 2·489	s. d. 63 2	\$ c. 1·674
“ 14.....	88 6	2·692	84 7	2·470	59 10	1·585
“ 21.....	90 7	2·755	77 10	2·273	57 10	1·532
“ 28.....	90 11	2·765	78 5	2·290	55 4	1·466
Average.....	89 0	2·706	81 6	2·381	59 0	1·564

V.—Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1920.

SOURCE: For Montreal, Trade Bulletin; for Toronto, Dealers' quotations; for Winnipeg and U.S. Cities, "The Northwestern Miller," Minneapolis.

Month.	Montreal.					Toronto.				
	Flour Manitoba Standard grade.		Flour Ontario del'd at Montreal.		Shorts.	Standard Flour. (Wt. bags).		Standard Flour. (Cotton bags.)		Shorts.
	Per bbl.	\$ cts.	Per bbl.	\$ cts.		Per bbl.	\$ cts.	Per bbl.	\$ cts.	
1920.										
January.....	13 34	9 75	44 70	52 25	\$ 52 25	13 25	13 40	45 25	52 25	
February.....	13 40	10 90	45 25	52 25	\$ 52 25	13 25	13 45	45 25	52 25	
March.....	13 40	10 76	45 25	52 25	\$ 52 25	13 25	13 45	45 25	52 25	
April.....	13 47	10 76	48 87	55 87	\$ 60 50	13 40	13 60	51 25	58 25	
May.....	14 55	11 38	53 50	60 50	\$ 61 25	14 85	15 05	54 25	61 25	
June.....	14 95	13 25	54 25	61 25	\$ 61 25	14 85	15 05	54 25	61 25	
July.....	14 92	Nominal	54 25	61 25	\$ 61 25	14 85	15 05	54 25	61 25	
August.....	14 95	Nominal	54 75	61 75	\$ 61 75	14 75	14 55	54 25	59 75	
Month.	Winnipeg.					Minneapolis.				
	Flour.		Bran.		Shorts.	Flour.		Bran.		Shorts.
	Per bbl.	\$ cts.	Per ton.	\$ cts.		Per bbl.	\$ cts.	Per ton.	\$ cts.	
1920.										
January.....	12 65	39 00	46 00	\$ 46 00	\$ 46 00	14 53	15 36	41 58½	42 70	44 37
February.....	12 65	39 00	46 00	\$ 46 00	\$ 46 00	13 41	14 20	42 50	43 87½	47 83
March.....	12 65	39 00	46 00	\$ 46 00	\$ 46 00	13 37½	14 25	47 00	48 25	51 50
April.....	12 76½	43 50	50 50	\$ 50 50	\$ 50 50	14 55	15 01	49 66	50 50	54 87½
May.....	13 64	46 00	53 80	\$ 53 80	\$ 53 80	15 28	15 69 53	50 00	53 40	57 25
June.....	14 30	48 00	55 00	\$ 55 00	\$ 55 00	14 02	14 60	50 75	52 62½	56 00
July.....	14 30	48 00	55 00	\$ 55 00	\$ 55 00	13 68	14 00½	47 00	48 12½	53 25
August.....	14 30	48 00	54 00	\$ 54 00	\$ 54 00	12 32	12 88	41 50	42 80	50 00
Month.	Duluth.					Minneapolis.				
	Flour.		Bran.		Shorts.	Flour.		Bran.		Shorts.
	Per bbl.	\$ cts.	Per ton.	\$ cts.		Per bbl.	\$ cts.	Per ton.	\$ cts.	
1920.										
January.....	14 18	44 43	52 25	\$ 52 25	\$ 52 25	14 18	44 43	52 25	\$ 52 25	
February.....	13 35	43 66	48 50	\$ 48 50	\$ 48 50	13 35	43 66	48 50	\$ 48 50	
March.....	13 55	43 63½	52 87½	\$ 52 87½	\$ 52 87½	13 55	43 63½	52 87½	\$ 52 87½	
April.....	14 25	44 50	57 60	\$ 57 60	\$ 57 60	14 25	44 50	57 60	\$ 57 60	
May.....	14 95	45 30	56 75	\$ 56 75	\$ 56 75	14 95	45 30	56 75	\$ 56 75	
June.....	14 15	44 50	54 50	\$ 54 50	\$ 54 50	14 15	44 50	54 50	\$ 54 50	
July.....	14 17½	44 37½	54 50	\$ 54 50	\$ 54 50	14 17½	44 37½	54 50	\$ 54 50	
August.....	12 35	43 01½	51 80	\$ 51 80	\$ 51 80	12 35	43 01½	51 80	\$ 51 80	

NOTE.—The ton=2,000 lb. and the barrel = 196 lb.

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	March.	April.	May.	June.	July.	Aug.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Montreal—						
Steers, heavy finished.....	—	15.50	—	15.75	—	—
Steers, 1,000-1,200 lb., good.....	13.54	14.18	15.25	15.9125	14.50	11.82
Steers, 1,000-1,200 lb., common.....	—	—	—	—	12.00	11.27
Steers, 700-1,000 lb., good.....	12.34	13.62	14.20	14.6875	13.65	11.00
Steers, 700-1,000 lb., common.....	11.00	11.57	12.00	12.8125	10.95	9.00
Heifers, good.....	12.03	13.52	13.50	14.0625	12.70	70.25
Heifers, fair.....	10.34	10.72	11.25	11.75	10.40	8.67
Heifers, common.....	8.00	8.90	9.65	9.125	7.70	7.22
Cows, good.....	11.10	11.53	11.65	11.8125	10.65	9.28
Cows, common.....	8.27	8.62	9.00	9.25	7.75	6.73
Bulls, good.....	10.66	11.86	11.10	11.625	10.583	9.26
Bulls, common.....	8.70	9.02	9.25	9.50	6.70	5.88
Canners and Cutters.....	6.05	6.24	6.35	6.3125	4.75	4.24
Oxen.....	10.61	—	11.25	12.50	10.00	—
Calves, veal.....	16.24	14.48	12.10	12.5625	10.20	11.98
Calves, grass.....	7.96	—	—	8.25	7.25	6.46
Stockers, 450-800 lb., good.....	—	—	—	—	—	—
Stockers, 450-800 lb., fair.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., good.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	20.22	20.93	21.00	20.4375	21.04	20.77
Hogs (fed and watered), heavies.....	—	20.75	20.50	19.516	18.875	18.41
Hogs (fed and watered), lights.....	19.93	20.57	20.80	—	18.90	—
Hogs (fed and watered), sows.....	16.23	16.71	16.90	16.337	16.87	16.30
Hogs (fed and watered), stags.....	—	—	—	—	13.90	—
Lambs, good.....	17.33	16.29	—	18.1666	14.90	12.71
Lambs, common.....	16.55	15.22	—	—	13.125	10.66
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	12.73	12.59	12.25	10.925	8.62	7.16
Sheep, common.....	11.81	11.56	11.50	9.50	7.45	6.68
Toronto—						
Steers, heavy, finished.....	13.74	14.25	15.15	15.195	15.55	14.04
Steers, 1,000-1,200 lb., good.....	13.13	13.57	14.47	14.85	14.65	12.91
Steers, 1,000-1,200 lb., common.....	9.59	11.53	12.85	12.64	12.50	10.75
Steers, 700-1,000 lb., good.....	12.33	13.04	13.85	14.84	14.20	11.43
Steers, 700-1,000 lb., common.....	9.56	10.70	11.71	11.8225	11.85	10.37
Heifers, good.....	12.38	12.95	13.83	14.60	14.05	12.83
Heifers, fair.....	10.30	11.02	12.07	13.142	12.15	10.61
Heifers, common.....	8.52	9.29	10.23	10.775	9.75	8.64
Cows, good.....	10.54	10.75	11.56	12.8125	11.90	10.29
Cows, common.....	8.62	8.68	9.66	11.0825	9.75	8.06
Bulls, good.....	10.27	10.55	11.69	12.172	11.20	8.90
Bulls, common.....	8.62	8.91	9.64	10.112	8.70	6.91
Canners and Cutters.....	5.93	6.04	6.09	5.855	4.90	4.33
Oxen.....	—	—	—	—	—	—
Calves, veal.....	19.18	16.45	15.43	15.58	16.85	17.50
Calves, grass.....	8.25	10.00	—	—	—	—
Stockers, 450-800 lb., good.....	9.90	10.35	11.32	11.557	9.85	9.00
Stockers, 450-800 lb., fair.....	8.86	9.21	1.67	10.15	8.60	8.00
Feeders, 800-1,000 lb., good.....	11.21	11.62	12.55	12.912	11.65	11.63
Feeders, 800-1,000 lb., fair.....	10.50	10.93	11.81	11.082	10.125	9.64
Hogs (fed and watered), select.....	19.62	20.15	20.23	19.59	20.60	20.39
Hogs (fed and watered), heavies.....	18.32	18.71	19.14	18.617	19.6875	19.57
Hogs (fed and watered), lights.....	17.45	18.03	18.14	17.7533	18.60	18.18
Hogs (fed and watered), sows.....	15.43	15.98	16.25	15.425	16.80	16.33
Hogs (fed and watered), stags.....	13.59	13.50	14.22	14.25	—	—
Lambs, good.....	19.86	18.65	16.77	19.1675	17.25	14.87
Lambs, common.....	15.50	15.72	15.01	17.385	15.10	10.77
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	13.23	14.60	14.09	12.18	10.45	8.46
Sheep, common.....	7.07	6.86	7.68	7.535	7.45	6.32
Winnipeg—						
Steers, heavy, finished.....	12.13	13.37	15.01	15.227	12.30	11.19
Steers, 1,000-1,200 lb., good.....	11.53	12.45	14.10	14.495	11.746	10.57
Steers, 1,000-1,200 lb., common.....	9.00	9.00	9.50	10.00	8.96	7.81
Steers, 700-1,000 lb., good.....	10.11	11.46	13.35	13.3975	10.70	9.27
Steers, 700-1,000 lb., common.....	8.73	9.13	—	9.00	7.708	6.68
Heifers, good.....	11.07	11.36	13.40	13.3825	10.88	9.77

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	March.	April.	May.	June.	July.	Aug.
Winnipeg—con.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Heifers, fair.....	8-93	9-32	10-26	10-29	8-488	7-60
Heifers, common.....	6-75	7-25	8-00	7-56	6-148	5-50
Cows, good.....	9-44	10-24	11-43	11-44	9-484	8-60
Cows, common.....	7-44	7-95	8-68	8-6875	7-026	6-20
Bulls, good.....	7-15	8-21	9-42	9-282	6-696	6-22
Bulls, common.....	6-19	6-37	6-90	6-778	5-443	5-11
Canners and Cutters.....	5-09	4-54	4-41	4-3725	3-886	3-60
Oxen.....	8-32	6 00	—	8 25	7-128	6-44
Calves, veal.....	11-01	12-59	13-21	11-5475	10-572	9-07
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	9-29	8-63	8-63	8-91	7-418	6-31
Stockers, 450-800 lb., fair.....	7-39	7-42	7-91	7-145	6-012	5-12
Feeders, 800-1,100 lb., good.....	10-60	10-63	11-94	10-365	9-546	8-55
Feeders, 800-1,100 lb., fair.....	9-69	9-09	9-80	8-852	7-534	6-57
Hogs (fed and watered), select.....	20-70	20-03	21-61	19-395	18-50	19-73
Hogs (fed and watered), heavies.....	18-48	17-91	19-65	17-252	16-492	17-23
Hogs (fed and watered), lights.....	19-00	17-72	19-56	17-1125	16-674	17-94
Hogs (fed and watered), sows.....	15-56	16-00	17-92	15-367	14-504	15-25
Hogs (fed and watered), stags.....	12-50	12-46	15-32	13-245	17-492	12-16
Lambs, good.....	15-03	15-00	15-65	15-995	17-974	12-53
Lambs, common.....	—	—	—	—	8-25	7-50
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	12-01	12-00	12-20	12-6075	9-658	7-77
Sheep, common.....	8-00	—	8-00	7-88	6-476	4-87
Calgary—						
Steers, heavy, finished.....	12-08	12-35	14-63	14-083	11-00	9-85
Steers, 1,000-1,200 lb., good.....	11-53	12-02	13-72	13-00	10-30	9-64
Steers, 1,000-1,200 lb., common.....	9-00	10-00	10-76	12-85	—	7-22
Steers, 700-1,000 lb., good.....	10-00	10-00	13-30	12 8333	—	8-68
Steers, 700-1,000 lb., common.....	9 25	9-25	10-35	—	—	7-19
Heifers, good.....	10-34	11-00	13-50	13-25	8-25	7-86
Heifers, fair.....	9-63	10-10	—	—	—	7-42
Heifers, common.....	8-67	—	—	—	—	6-25
Cows, good.....	10-13	10-48	13-06	12-0625	8-96	7-58
Cows, common.....	7-86	7-92	9-57	8-35	7-138	6-31
Bulls, good.....	7-79	8-12	9-50	—	—	5-43
Bulls, common.....	6-75	7-14	—	5-50	5-00	—
Canners and Cutters.....	4-21	4-00	—	—	—	3-88
Oxen.....	—	—	—	—	—	—
Calves, veal.....	9-50	8-43	11-95	13-50	11-716	9-62
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8-11	8-50	9-09	9-187	8-33	7-68
Stockers, 450-800 lb., fair.....	6-89	7-50	8-60	8-037	7-61	6-60
Feeders, 800-1,100 lb., good.....	9-67	10-00	10-48	10-525	9-85	9-06
Feeders, 800-1,100 lb., fair.....	8-93	9-00	—	9-50	9-05	8-10
Hogs (fed and watered), select.....	20-22	20-49	21-52	19-525	17-90	19-34
Hogs (fed and watered), heavies.....	19-00	19-50	—	19-25	16-85	18-09
Hogs (fed and watered), lights.....	19-25	19-41	20-39	19-1725	17-30	17-78
Hogs (fed and watered), sows.....	17-45	17-47	18-40	16-275	14-90	18-27
Hogs (fed and watered), stags.....	14-00	—	—	—	12-25	13-15
Lambs, good.....	—	—	9-00	—	13-375	11-02
Lambs, common.....	—	—	—	—	11-00	8-77
Sheep, heavy.....	—	—	—	—	8-50	—
Sheep, light.....	13-72	17-30	14-60	13-50	9-083	9-72
Sheep, common.....	—	—	—	—	—	7-00
Edmonton—						
Steers, heavy, finished.....	12-62	13-45	14-24	—	—	9 25
Steers, 1,000-1,200 lb., good.....	11-72	11-97	14-08	12-8125	10-50	8-80
Steers, 1,000-1,200 lb., common.....	10-06	10-31	11-43	11-125	9-4375	7-16
Steers, 700-1,000 lb., good.....	10-51	10-71	12-00	11-75	9-50	7-68
Steers, 700-1,000 lb., common.....	9-29	9-53	10-68	10-1666	8-875	6-18
Heifers, good.....	10-78	10-68	12-10	12-25	9-417	7-30
Heifers, fair.....	9-57	10-34	11-03	10-4	8-8125	6-42
Heifers, common.....	8-45	9-20	10-00	9-375	7-90	5-22
Cows, good.....	10-28	10-42	12-48	11-50	8-85	7-23
Cows, common.....	8-07	8-68	9-76	9-1666	7-00	5-48
Bulls, good.....	7-75	7-75	9-00	7-833	6-00	5-30
Bulls, common.....	6-75	6-42	7-25	7-125	4-75	4-28
Canners and Cutters.....	4-60	5-00	5-50	—	—	—

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	March.	April.	May.	June.	July.	Aug.
Edmonton—con.						
Oxen.....	9-30	8-44	—	—	—	—
Calves, veal.....	11-38	11-84	14-47	14-00	10-60	9-23
Calves grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8-06	8-14	9-28	8-375	7-50	6-56
Stockers, 450-800 lb., fair.....	7-12	7-57	8-45	7-437	6-40	5-31
Feeders, 800-1,000 lb., good.....	—	—	10-93	10-375	9-15	—
Feeders, 800-1,000 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	19-89	19-94	21-20	19-3125	17-85	19-21
Hogs (fed and watered), heavies.....	18-46	18-99	20-25	18-312	16-813	17-82
Hogs (fed and watered), lights.....	16-62	16-83	18-15	17-0625	15-813	17-25
Hogs (fed and watered), sows.....	16-80	16-85	18-20	17-062	15-85	16-93
Hogs (fed and watered), stags.....	15-88	15-29	17-27	15-375	14-00	—
Lambs, good.....	15-81	17-00	—	—	13-00	9-07
Lambs, common.....	13-53	—	—	10-00	10-75	7-40
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	10-00	—	—	13-00	10-00	7-63
Sheep, common.....	8-83	—	—	—	8-25	5-48

VII. Average Prices of Milk in Principal Canadian Cities, 1919-20.

SOURCE: Dealers' Quotations.

Description.		Halifax, N.S.	Montreal, P.Q.	Toronto, Ont.	Winnipeg, Man.	Vancouver B.C.
Price Paid to Producers.		Cents per gallon.	Cents per gallon.	Per 8 gall. can.	Per cwt. ¹	Per lb. butter fat.
Winter.....	1919	40	35	\$ c. \$ c. 2 80	\$ c. 2 95	\$ c. 1 10
Spring and Summer.....	1919	40	30	2 25-2 55	2 95	1 00
Fall and Winter.....	1919-20	40	40	3 10	3 40	1 10
Spring and Summer.....	1920	40	31	2 35-2 70	Per 10 gals. ² 3-502	1 10
³ Fall and Winter.....	1920-21	—	—	3 25	—	—
Wholesale Price to Hotels, Stores, etc.—		Cents per quart in cans.	Cents per quart in cans.	Cents per quart.	Cents per gallon.	Cents per gallon.
Winter.....	1919	13½	14	—	44	45-50
Spring and Summer.....	1919	13½	14	—	40	45-50
Fall and Winter.....	1919-20	13½	14	—	48	49
Spring and Summer.....	1920	13½	14	—	43-44	48
³ Fall and Winter.....	1920-21	—	—	—	53-55	—
Retail Price per single Quart Cash—		Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.
Winter.....	1919	15	14	15	13	15
Spring and Summer.....	1919	15	13	14	13	15
Fall and Winter.....	1919-20	15	16	16	15	15
Spring and Summer.....	1920	15	14-16	15	15	15
³ Fall and Winter.....	1920-21	—	—	17	—	—

¹Testing 3-6 p.c.

²103 lb.

³Preliminary.

VIII. Average Prices of Live Stock at Chicago, U.S.A., 1920.—Source: Market Reporter, U.S. Department of Agriculture.

Date	Hogs.			Cattle.			Sheep.					
	Bulk of Sales.			Beef Steers (choice and prime.)		Heifers.	Veal Calves.		Calves.	Lams.	Wethers.	
							Medium Heavy.	Light Weight.				Common Choice.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	Yearlings, Medium prime.
1920.												
Jan. 6.	14 55-14 80	14 65-14 90	14 55-14 80	18 75-20 00	18 50-20 00	6 50-14 75	16 25-17 50	9 75-10 75	16 50-19 00	16 50-19 00	\$ c.	\$ c.
" 13.	14 40-14 70	14 50-14 85	14 40-14 75	18 25-19 75	17 75-19 25	6 50-14 75	16 50-17 50	9 75-10 75	17 25-18 50	17 25-18 50	\$ c.	\$ c.
" 20.	15 15-15 40	15 25-15 55	15 15-15 45	17 50-19 00	17 00-18 50	6 75-14 25	17 00-18 50	9 75-10 75	17 50-19 30	17 50-19 30	\$ c.	\$ c.
" 27.	15 60-15 75	15 60-15 75	15 50-15 85	15 50-17 50	14 50-16 75	6 85-13 75	17 50-19 25	9 75-10 75	17 50-19 30	17 50-19 30	\$ c.	\$ c.
Feb. 3.	15 00-15 30	15 00-15 30	15 00-15 40	15 00-17 15	14 10-16 65	6 85-13 75	17 50-19 25	9 75-10 75	17 50-19 30	17 50-19 30	\$ c.	\$ c.
" 10.	14 40-15 10	14 50-15 30	14 50-15 20	15 00-17 00	13 75-16 50	6 50-12 50	16 25-17 50	9 50-11 00	18 50-21 00	18 50-21 00	\$ c.	\$ c.
" 17.	14 00-14 65	14 00-14 50	14 40-14 85	14 75-16 85	14 00-16 50	6 40-13 00	16 25-17 50	9 50-11 00	18 00-21 25	18 00-21 25	\$ c.	\$ c.
Mar. 2.	13 75-14 25	13 85-14 35	14 15-14 50	13 75-16 00	12 85-15 60	6 50-12 50	15 00-16 50	9 50-11 00	17 50-20 65	17 50-20 65	\$ c.	\$ c.
" 9.	14 40-15 25	14 70-15 25	15 00-15 60	14 25-16 00	13 40-15 75	6 75-13 25	15 00-16 50	9 50-11 00	17 50-20 30	17 50-20 30	\$ c.	\$ c.
" 16.	14 50-15 40	14 75-15 50	15 30-15 85	13 50-15 25	13 50-15 25	7 40-13 00	16 25-17 25	9 50-11 00	17 25-20 00	17 25-20 00	\$ c.	\$ c.
" 23.	14 10-15 50	14 50-15 80	15 75-16 35	14 00-15 50	14 25-15 50	7 35-13 75	15 25-17 25	9 50-11 00	17 25-20 30	17 25-20 30	\$ c.	\$ c.
April 6.	15 25-16 25	15 65-16 50	16 10-16 50	14 00-15 50	14 25-15 50	7 40-13 00	16 25-17 25	9 50-11 00	17 25-20 30	17 25-20 30	\$ c.	\$ c.
" 13.	14 75-15 50	14 90-15 80	15 15-15 60	13 15-15 35	13 15-15 35	8 00-14 00	16 00-17 50	9 50-11 25	18 00-20 75	18 00-20 75	\$ c.	\$ c.
" 20.	14 85-16 25	15 30-16 50	15 90-16 50	14 75-15 35	13 25-14 25	7 85-14 25	15 00-16 00	9 50-11 25	18 00-20 75	18 00-20 75	\$ c.	\$ c.
" 27.	13 65-15 15	14 15-15 35	14 75-15 35	13 15-15 35	13 15-15 35	7 15-13 75	12 00-14 00	9 25-11 00	16 50-18 50	16 50-18 50	\$ c.	\$ c.
May 4.	13 40-15 10	14 00-15 25	14 75-15 35	13 15-15 35	13 15-15 35	7 85-13 75	12 00-14 00	9 25-11 00	16 50-18 50	16 50-18 50	\$ c.	\$ c.
" 11.	13 90-15 10	14 35-15 15	14 80-15 25	13 00-13 85	13 25-14 35	8 00-13 50	10 00-13 75	9 00-10 50	15 25-17 50	15 25-17 50	\$ c.	\$ c.
" 18.	13 35-14 25	13 75-14 45	14 00-14 50	12 85-13 75	13 00-14 25	8 00-13 50	10 00-13 75	9 00-10 50	15 00-17 25	15 00-17 25	\$ c.	\$ c.
" 25.	13 85-14 75	14 25-14 80	14 40-14 80	13 15-14 25	13 00-13 90	7 75-13 00	10 00-13 75	9 00-10 50	15 00-17 25	15 00-17 25	\$ c.	\$ c.
June 1.	13 60-14 40	14 10-14 60	14 00-14 60	13 15-14 25	13 75-14 60	7 75-13 00	10 00-13 75	9 00-10 50	14 50-17 50	14 50-17 50	\$ c.	\$ c.
" 8.	13 85-14 50	14 30-14 80	14 00-14 60	15 00-16 25	15 00-16 00	8 50-14 25	12 25-15 00	9 00-10 75	14 50-17 50	14 50-17 50	\$ c.	\$ c.
" 15.	14 20-15 15	14 85-15 25	14 75-15 30	16 25-17 00	16 00-17 00	8 00-14 50	13 25-15 25	9 00-10 75	14 25-17 00	14 25-17 00	\$ c.	\$ c.
" 22.	14 80-15 90	15 60-16 00	15 40-16 00	16 25-17 10	16 00-17 10	7 00-14 25	13 50-15 25	9 00-10 75	13 25-17 00	13 25-17 00	\$ c.	\$ c.
" 29.	14 40-16 35	15 80-16 50	15 60-16 50	16 25-17 10	16 25-17 10	7 00-15 00	12 75-13 75	9 00-10 75	13 00-17 50	13 00-17 50	\$ c.	\$ c.
July 6.	13 50-15 75	15 00-15 85	14 75-15 85	16 10-16 85	16 00-16 85	6 50-14 50	12 75-13 75	8 50-10 00	11 50-15 00	11 50-15 00	\$ c.	\$ c.
" 13.	13 75-16 00	15 35-16 15	15 10-16 15	16 75-17 25	16 40-17 25	6 50-11 75	12 25-14 00	8 50-10 00	11 50-15 00	11 50-15 00	\$ c.	\$ c.
" 20.	14 50-16 50	15 90-16 60	15 50-16 65	16 00-16 85	16 00-17 25	6 50-14 90	13 00-15 50	8 50-10 00	13 50-16 25	13 50-16 25	\$ c.	\$ c.
" 27.	13 40-15 50	14 50-15 55	14 75-15 60	16 00-16 85	16 00-17 25	6 50-14 75	13 00-15 50	8 50-10 00	12 50-15 10	12 50-15 10	\$ c.	\$ c.
Aug. 3.	13 50-16 00	14 60-16 00	15 10-16 10	16 25-17 25	16 00-17 25	6 00-14 75	12 50-15 10	9 00-10 75	12 00-15 10	12 00-15 10	\$ c.	\$ c.
" 10.	14 00-16 00	15 00-16 00	15 20-16 10	16 25-17 50	16 00-17 25	6 00-14 90	14 00-15 50	9 00-10 75	11 75-14 35	11 75-14 35	\$ c.	\$ c.
" 17.	14 40-16 00	15 25-16 00	15 40-16 00	16 25-17 50	16 25-17 50	6 00-15 00	14 00-15 50	9 00-10 75	10 50-13 10	10 50-13 10	\$ c.	\$ c.
" 24.	13 80-15 45	14 50-15 50	14 75-15 60	16 50-17 50	16 50-17 50	6 00-15 00	14 50-15 50	8 50-10 00	11 25-14 00	11 25-14 00	\$ c.	\$ c.
" 31.	14 75-16 00	15 25-16 10	15 50-16 10	16 75-17 75	16 50-17 75	6 50-15 00	15 00-17 50	8 75-10 75	12 00-14 50	12 00-14 50	\$ c.	\$ c.

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OTTAWA

THOMAS MULVEY

Printer to the King's Most Excellent Majesty

1920

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DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. CHIEF, DIVISION OF AGRICULTURAL STATISTICS: ERNEST H. GODFREY, F.S.S. DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

FIELD CROPS OF CANADA.

Report for the month ended September 30, 1920.

To-day the Dominion Bureau of Statistics issued a Bulletin containing a definitive statement of the areas sown to the principal field crops in Canada for the year 1920, as compared with 1919, together with a second or provisional estimate of total yields. The areas are estimated on the basis of returns collected last June from individual farmers throughout Canada under arrangements made between the Dominion and Provincial Governments for the joint collection of the annual agricultural statistics of Canada. These have been in force since 1917 for four provinces and since 1918 for all the provinces. The provisional estimate of total yields is based upon the areas so established and upon returns of the average yields per acre as reported by crop correspondents at the end of September. The Bulletin gives also particulars respecting the quality of cereal crops and the condition on September 30 of root and fodder crops.

AREAS SOWN TO FIELD CROPS.

The total areas estimated to be sown to the principal field crops for 1920 are, in acres, as follows, the comparative figures for 1919 being given within brackets: Wheat 18,232,374 (19,125,968); oats 15,849,928 (14,952,114); barley 2,551,919 (2,645,509); rye 649,654 (753,081); peas 186,348 (230,351); beans 72,163 (83,577); buckwheat 378,476 (444,732); flax 1,428,164 (1,093,115); mixed grains 811,634 (901,612); corn for husking 291,650 (264,607); potatoes 784,544 (818,767); turnips, etc., 290,286 (317,296); hay and clover 10,379,292 (10,595,383); alfalfa 238,556 (226,869); fodder corn 588,977 (511,769). For oats the area returned for 1920 is the highest on record.

YIELD OF PRINCIPAL CEREALS.

According to the reports of crop correspondents at the end of September, the average yields in bushels per acre of the principal cereals, as compared with the averages for 1919 (in brackets), are as follows: Wheat 16 (10); oats $34\frac{1}{4}$ ($26\frac{1}{4}$); barley $25\frac{3}{4}$ ($21\frac{1}{4}$); rye $18\frac{3}{4}$ ($13\frac{1}{2}$); peas $19\frac{3}{4}$ ($14\frac{3}{4}$); beans 20 ($16\frac{1}{2}$); buckwheat $26\frac{1}{4}$ ($23\frac{1}{2}$); flax $7\frac{1}{2}$ (5); mixed grains $38\frac{3}{4}$ (31); corn for husking $47\frac{1}{4}$ (64). The provisional estimate of the total yields of these crops in bushels is as

follows: Wheat 293,361,000 (193,260,400); oats 543,058,000 (394,387,000); barley 65,559,000 (56,389,400); rye 12,190,000 (10,207,400); peas 3,702,800 (3,406,300); beans, 1,435,800 (1,388,600); buckwheat 9,966,500 (10,550,800); flax 10,756,000 (5,472,800); mixed grains 31,427,000 (27,851,700); corn for husking 13,764,000 (16,940,500). The yield of oats for 1920 is the highest on record.

GRAIN YIELDS OF THE PRAIRIE PROVINCES.

The following is the second or provisional estimate in bushels of the grain yields in the three Prairie Provinces, the corresponding totals for 1920 being given within brackets: Wheat 263,915,000 (165,544,300); oats 323,270,000 (235,580,000); barley 42,789,000 (36,682,400); rye 9,040,000 (7,262,400); and flaxseed 10,307,000 (5,232,300). By provinces, the estimated yields are: Manitoba, wheat 37,879,000 (40,975,300); oats 56,219,000 (57,698,000); barley 18,040,000 (17,149,400); rye 2,415,000 (4,089,400); flaxseed, 1,465,000 (520,300). Saskatchewan, wheat 138,340,000 (89,994,000); oats 148,098,000 (112,157,000); barley 11,289,000 (8,971,000); rye 2,802,000 (2,000,000); flaxseed 7,986,000 (4,490,000). Alberta, wheat 87,696,000 (34,575,000); oats 118,953,000 (65,725,000); barley, 13,460,000 (10,562,000); rye 3,823,000 (1,173,000); flaxseed 856,000 (222,000).

QUALITY OF CEREAL CROPS.

The quality of the cereal crops at harvest time, as compared with a standard of 100, which represents the average weight per measured bushel for the ten years 1910-19, is reported as follows, the corresponding percentages for 1919 being given within brackets; Fall wheat 102 (96); spring wheat 96 (91); all wheat 98 (92); oats 101 (90); barley 99 (89); rye 98 (92); peas 100 (91); beans 99 (95); buckwheat 97 (96); mixed grains 102 (94); flaxseed 97 (93); corn for husking 101 (94).

CONDITION OF ROOT AND FODDER CROPS.

The condition of root and fodder crops at the end of September, expressed in percentage of the decennial average, was as follows: Potatoes 101 (95); turnips, etc., 98 (91); sugar beets 100 (85); fodder corn 102 (95); alfalfa 99 (91). The figures within brackets are those of September 30, 1919.

Dominion Bureau of Statistics,
Ottawa, October 29, 1920.

ERNEST H. GODFREY,
Chief, Division of Agricultural
Statistics.

I. Areas and Provisional Estimate of the Yield of Cereal Crops for 1920, as compared with the Final Estimate of 1919.

Province.	1919	1920	1919	1920	1919	1920
	acres.	acres.	bush. per acre.	bush. per acre.	bush.	bush.
Canada—						
Fall wheat.....	672,796	814,133	23.75	23.75	16,006,000	19,265,000
Spring wheat.....	18,453,115	17,418,241	9.50	15.75	177,254,400	274,096,000
All wheat.....	19,125,968	18,232,374	10.00	16.00	193,260,400	293,361,000
Oats.....	14,952,114	15,849,928	26.25	34.25	394,387,000	543,058,000
Barley.....	2,645,509	2,551,919	21.25	25.75	56,389,400	65,559,000
Rye.....	753,081	649,654	13.50	18.75	10,207,400	12,190,000
Peas.....	230,351	186,348	14.75	19.75	3,406,300	3,702,800
Beans.....	83,577	72,163	16.50	20.00	1,388,600	1,435,800
Buckwheat.....	444,732	378,476	23.50	26.25	10,550,800	9,966,500
Flax.....	1,093,115	1,428,164	5.00	7.50	5,472,800	10,756,000
Mixed grains.....	901,612	811,634	31.00	38.75	27,851,700	31,427,000
Corn, husking.....	264,607	291,650	64.00	47.25	16,940,500	13,764,000
P. E. Island—						
Spring wheat.....	35,595	37,601	17.00	13.50	624,600	503,000
Oats.....	174,937	183,452	34.00	28.25	6,038,000	5,182,000
Barley.....	5,636	5,046	29.00	25.00	164,000	126,000
Peas.....	490	164	16.00	20.00	8,100	3,300
Buckwheat.....	4,094	4,035	20.75	28.00	87,800	112,500
Mixed grains.....	18,900	16,504	44.00	29.75	843,400	492,000
Nova Scotia—						
Spring wheat.....	28,931	26,116	19.50	19.50	564,000	511,000
Oats.....	158,838	152,976	36.00	33.00	5,718,000	5,044,000
Barley.....	13,894	11,487	31.25	27.75	434,000	319,000
Rye.....	1,046	470	29.50	15.00	31,000	7,000
Peas.....	1,896	1,046	20.00	22.00	38,000	23,000
Beans.....	6,859	4,617	12.75	18.50	87,000	85,000
Buckwheat.....	17,384	13,106	25.25	23.50	439,000	309,000
Mixed grains.....	8,628	6,171	37.50	33.50	218,000	207,000
New Brunswick—						
Spring wheat.....	35,641	29,485	17.50	17.75	623,000	523,000
Oats.....	305,484	309,071	30.25	28.25	9,261,000	8,731,000
Barley.....	10,662	8,177	26.75	22.50	285,000	184,000
Rye.....	353	254	20.00	14.50	7,000	4,000
Peas.....	4,697	2,844	14.75	16.75	69,000	48,000
Beans.....	6,409	4,254	16.50	18.25	106,000	78,000
Buckwheat.....	74,642	66,366	25.00	31.75	1,871,000	2,107,000
Mixed grains.....	5,297	3,395	33.75	30.50	179,000	104,000
Quebec—						
Spring wheat.....	251,089	222,045	16.75	18.75	4,206,000	4,163,000
Oats.....	2,141,107	2,205,908	26.75	32.50	57,275,000	71,692,000
Barley.....	234,892	194,444	22.75	26.00	5,344,000	5,056,000
Rye.....	33,481	28,462	17.25	18.00	578,000	512,000
Peas.....	81,642	60,870	15.00	17.50	1,225,000	1,065,000
Beans.....	43,202	35,835	19.75	20.50	853,000	735,000
Buckwheat.....	170,043	151,765	24.00	26.50	4,081,000	4,022,000
Flax.....	11,384	16,035	9.75	12.25	111,000	196,000
Mixed grains.....	157,637	143,423	27.00	31.00	4,256,000	4,446,000
Corn, husking.....	43,603	47,741	41.00	27.75	1,788,000	1,325,000
Ontario—						
Fall wheat.....	619,494	762,371	24.30	33.75	15,052,000	18,023,000
Spring wheat.....	361,150	267,367	15.60	17.25	5,646,500	4,606,000
All wheat.....	980,644	1,029,738	21.20	22.00	20,698,500	22,629,000
Oats.....	2,674,341	2,880,053	29.30	44.00	78,388,000	126,679,000
Barley.....	569,183	484,328	23.10	34.50	13,134,000	16,762,000
Rye.....	140,072	133,090	15.80	18.50	2,219,000	2,466,000
Peas.....	127,253	109,187	14.30	21.50	1,816,500	2,357,000
Beans.....	22,920	22,744	12.60	20.00	288,500	455,000
Buckwheat.....	178,569	143,204	22.80	23.75	4,072,000	3,416,000

I. Areas and Provisional Estimate of the Yield of Cereal Crops for 1920, as compared with the Final Estimate of 1919.—concluded.

Province.	1919	1920	1919	1920	1919	1920
	acres.	acres.	bush. per acre.	bush. per acre.	bush.	bush.
Ontario—con.						
Flax.....	13,717	21,053	9-40	12-00	129,500	253,000
Mixed grains.....	628,761	581,689	31-40	41-25	19,735,300	24,058,000
Corn, husking.....	221,004	243,909	68-60	51-00	15,152,500	12,439,000
Manitoba—						
Spring wheat.....	2,880,301	2,705,622	14-25	14-00	40,975,300	37,879,000
Oats.....	1,847,267	1,873,954	31-25	30-00	57,698,000	56,219,000
Barley.....	893,947	839,078	19-25	21-50	17,149,400	18,040,000
Rye.....	298,932	148,602	13-75	16-25	4,089,400	2,415,000
Peas.....	5,666	4,162	14-25	14-50	81,400	60,000
Mixed grains.....	30,355	28,800	25-00	37-00	759,000	1,066,000
Flax.....	57,379	146,455	9-00	10-00	520,300	1,465,000
Saskatchewan—						
Spring wheat.....	10,587,363	10,061,069	8-50	13-75	89,994,000	138,340,000
Oats.....	4,837,747	5,106,822	23-10	29-00	112,157,000	148,098,000
Barley.....	492,686	519,014	18-20	21-75	8,971,000	11,289,000
Rye.....	190,482	172,449	10-50	16-25	2,000,000	2,802,000
Peas.....	4,853	2,519	18-00	14-50	87,300	36,500
Beans.....	1,820	793	10-00	17-00	18,200	13,500
Mixed grains.....	22,017	18,361	35-00	33-50	771,000	615,000
Flax.....	929,945	1,140,921	4-80	7-00	4,490,000	7,986,000
Alberta						
Fall wheat.....	40,600	38,000	15-75	24-00	640,000	912,000
Spring wheat.....	4,241,902	4,036,483	8-00	21-50	33,935,000	86,784,000
All wheat.....	4,282,503	4,074,483	8-00	21-50	34,575,000	87,696,000
Oats.....	2,767,372	3,089,700	23-75	38-50	65,725,000	118,953,000
Barley.....	414,212	480,699	25-50	28-00	10,562,000	13,460,000
Rye.....	83,804	160,960	14-00	23-75	1,173,000	3,823,000
Peas.....	1,603	2,899	18-00	17-00	29,000	49,000
Beans.....	690	2,305	10-00	17-00	6,900	39,000
Mixed grains.....	26,000	8,398	36-25	30-75	943,000	258,000
Flax.....	80,690	103,700	2-75	8-25	222,000	856,000
British Columbia—						
Fall wheat.....	12,699	13,762	24-75	24-00	314,000	330,000
Spring wheat.....	31,202	32,453	22-00	24-25	686,000	787,000
All wheat.....	43,901	46,215	22-75	24-25	1,000,000	1,117,000
Oats.....	45,021	47,992	47-25	51-25	2,127,000	2,460,000
Barley.....	10,497	9,646	33-00	33-50	346,000	323,000
Rye.....	4,911	5,367	22-50	30-00	110,000	161,000
Peas.....	2,251	2,657	23-00	23-00	52,000	61,000
Beans.....	1,677	1,615	17-25	18-75	29,000	30,300
Mixed grains.....	4,017	4,893	36-50	37-00	147,000	181,000

II. Provisional Estimate of the Yield of Wheat, Oats, Barley, Rye, and Flax in the Prairie Provinces (Manitoba, Saskatchewan and Alberta), 1920, as compared with the Final Estimate for 1919.

Field Crops.	1919	1920	1919	1920	1919	1920
	acres.	acres.	bush. per acre.	bush. per acre.	bush.	bush.
Wheat.....	17,750,167	16,841,174	9-25	15-75	165,544,300	263,915,000
Oats.....	9,452,386	10,070,476	25-00	32-00	235,580,000	323,270,000
Barley.....	1,800,745	1,838,791	20-25	23-25	36,682,400	42,789,000
Rye.....	573,218	482,011	12-75	18-75	7,262,400	9,040,000
Flax.....	1,068,014	1,391,076	5-00	7-50	5,232,300	10,307,000

III. Areas sown to Root and Fodder Crops, 1920, as compared with 1919.

Province.	1919	1920	Province.	1919	1920
	acres.	acres.		acres.	acres.
Canada—			Ontario—con.		
Potatoes.....	818,767	784,544	Turnips, etc.....	123,029	119,744
Turnips, etc.....	317,296	290,286	Sugar beets.....	24,500	36,288
Sugar beets.....	24,500	36,288	Hay and clover.....	3,508,266	3,533,740
Hay and clover.....	10,595,383	10,379,292	Fodder corn.....	399,549	449,176
Fodder corn.....	511,769	588,977	Alfalfa.....	146,790	162,820
Alfalfa.....	226,869	238,556	Manitoba—		
P. E. Island—			Potatoes.....	42,000	37,000
Potatoes.....	36,234	36,322	Turnips, etc.....	6,045	7,404
Turnips, etc.....	12,337	9,397	Hay and clover.....	260,378	208,512
Hay and clover.....	237,883	243,394	Fodder corn.....	16,867	17,042
Fodder corn.....	522	190	Alfalfa.....	5,181	3,679
Nova Scotia—			Saskatchewan—		
Potatoes.....	62,060	50,092	Potatoes.....	66,176	53,814
Turnips, etc.....	30,291	19,946	Turnips, etc.....	13,932	10,449
Hay and clover.....	678,357	632,069	Hay and clover.....	265,417	234,532
Fodder corn.....	2,960	1,451	Fodder corn.....	6,690	16,685
New Brunswick—			Alfalfa.....	11,526	10,473
Potatoes.....	75,573	78,335	Alberta—		
Turnips, etc.....	24,279	20,030	Potatoes.....	45,848	43,000
Hay and clover.....	786,175	726,380	Turnips, etc.....	12,500	12,300
Fodder corn.....	5,906	5,243	Hay and clover.....	433,296	383,527
Quebec—			Fodder corn.....	900	7,644
Potatoes.....	315,590	310,692	Alfalfa.....	21,553	19,906
Turnips, etc.....	87,496	83,613	British Columbia—		
Hay and clover.....	4,299,360	4,290,121	Potatoes.....	18,000	17,780
Fodder corn.....	74,007	86,833	Turnips, etc.....	7,387	7,403
Alfalfa.....	28,488	28,200	Hay and clover.....	126,251	127,017
Ontario—			Fodder corn.....	4,368	4,713
Potatoes.....	157,286	157,509	Alfalfa.....	13,331	13,478

IV. Quality of Cereal Crops, 1918-20.

NOTE.—100 = Average weight per measured bushel, 1910-19.

Field Crops.	Sept. 30, 1918.	Sept. 30, 1919.	Sept. 30, 1920.	Field Crops.	Sept. 30, 1918.	Sept. 30, 1919.	Sept. 30, 1920.
	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.
Canada—				Nova Scotia—			
Fall wheat.....	89	96	102	Spring wheat.....	100	96	96
Spring wheat.....	99	91	96	Oats.....	101	96	94
All wheat.....	98	92	98	Barley.....	99	96	96
Oats.....	94	90	101	Rye.....	100	94	98
Barley.....	97	89	99	Peas.....	95	91	94
Rye.....	92	92	98	Beans.....	81	91	96
Peas.....	95	91	100	Buckwheat.....	85	92	97
Beans.....	82	95	99	Mixed grains.....	101	98	97
Buckwheat.....	86	96	97	New Brunswick—			
Mixed grains.....	98	94	102	Spring wheat.....	97	95	91
Flax.....	92	93	97	Oats.....	103	103	96
Corn for husking.....	89	94	101	Barley.....	96	96	94
P. E. Island—				Peas.....	85	92	98
Spring wheat.....	103	100	83	Beans.....	83	97	94
Oats.....	102	100	85	Buckwheat.....	86	101	92
Barley.....	97	101	92	Mixed grains.....	100	98	97
Peas.....	96	100	98	Quebec—			
Beans.....	81	96	97	Spring wheat.....	103	97	99
Buckwheat.....	88	94	92	Oats.....	102	99	106
Mixed grains.....	102	103	93				

IV. Quality of Cereal Crops, 1918-20—concluded.

NOTE.—100=Average weight per measured bushel, 1910-19.

Field Crops.	Sept. 30, 1918.	Sept. 30, 1919.	Sept. 30, 1920.	Field Crops.	Sept. 30, 1918.	Sept. 30, 1919.	Sept. 30, 1920.
	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.
Quebec—con.				Saskatchewan—			
Barley.....	100	99	102	Spring wheat.....	89	92	97
Rye.....	101	100	97	Oats.....	86	91	96
Peas.....	96	93	102	Barley.....	83	89	95
Beans.....	88	97	100	Rye.....	92	83	98
Buckwheat.....	85	98	101	Peas.....	—	77	100
Mixed grains.....	98	99	103	Beans.....	—	95	—
Flax.....	95	97	101	Mixed grains.....	—	96	98
Corn for husking.....	88	96	102	Flax.....	87	89	94
Ontario—				Alberta—			
Spring wheat.....	103	87	92	Fall wheat.....	94	93	—
All wheat.....	95	91	95	Spring wheat.....	87	91	102
Oats.....	102	83	105	All wheat.....	88	92	—
Barley.....	100	84	101	Oats.....	79	87	97
Rye.....	87	89	99	Barley.....	77	91	96
Peas.....	94	87	99	Rye.....	83	90	98
Beans.....	91	92	100	Peas.....	99	100	100
Buckwheat.....	87	94	97	Beans.....	—	—	100
Mixed grains.....	102	87	104	Mixed grains.....	92	98	97
Flax.....	99	94	102	Flax.....	78	93	78
Corn for husking.....	82	93	101	British Columbia—			
Manitoba—				Fall wheat.....	78	97	97
Spring wheat.....	96	88	99	Spring wheat.....	81	94	97
Oats.....	93	88	96	All wheat.....	81	95	97
Barley.....	95	81	92	Oats.....	76	95	94
Rye.....	95	92	96	Barley.....	71	94	96
Peas.....	—	98	99	Rye.....	79	94	101
Beans.....	—	100	95	Peas.....	83	93	98
Mixed grains.....	78	97	96	Beans.....	—	—	98
Flax.....	93	92	92	Mixed grains.....	88	97	97

V.—Comparative Condition of Root and Fodder Crops, September 30, 1920, as compared with September 30, 1918 and 1919, and with July 31 and August 31, 1920.

NOTE.—100=Average yield per acre for the ten years 1910-19.

Field Crops.	Sept. 30, 1918.	Sept. 30, 1919.	July 31, 1920.	Aug. 31, 1920.	Sept. 30, 1920.
	p.c.	p.c.	p.c.	p.c.	p.c.
Canada—					
Potatoes.....	93	95	104	102	101
Turnips, mangolds, etc.....	96	91	95	98	98
Sugar beets.....	97	85	99	101	100
Corn for fodder.....	92	95	98	102	102
Alfalfa.....	89	91	—	—	99
P. E. Island—					
Potatoes.....	89	93	104	102	100
Turnips, mangolds, etc.....	99	95	97	98	97
Corn for fodder.....	88	93	96	102	100
Nova Scotia—					
Potatoes.....	101	94	101	103	100
Turnips, mangolds, etc.....	99	97	96	94	92
Corn for fodder.....	89	93	98	102	94
Alfalfa.....	100	103	—	—	90
New Brunswick—					
Potatoes.....	91	96	95	99	96
Turnips, mangolds, etc.....	93	97	94	95	100
Corn for fodder.....	83	102	94	100	105
Alfalfa.....	80	80	—	—	80

V.—Comparative Condition of Root and Fodder Crops, etc.—concluded.

NOTE.—100 = Average yield per acre for the ten years 1910-19.

Field Crops.	Sept. 30, 1918.	Sept. 30, 1919.	July 31, 1920.	Aug. 31, 1920.	Sept. 30, 1920.
	p.c.	p.c.	p.c.	p.c.	p.c.
Quebec—					
Potatoes.....	100	103	105	106	105
Turnips, mangolds, etc.....	97	99	99	100	101
Corn for fodder.....	89	103	98	103	104
Alfalfa.....	96	99	—	—	103
Ontario—					
Potatoes.....	88	81	104	107	108
Turnips, mangolds, etc.....	96	83	98	100	98
Sugar beets.....	97	85	99	101	100
Corn for fodder.....	94	93	97	102	103
Alfalfa.....	92	96	—	—	101
Manitoba—					
Potatoes.....	106	89	96	88	88
Turnips, mangolds, etc.....	99	98	95	88	95
Corn for fodder.....	96	99	95	89	93
Alfalfa.....	95	98	—	—	95
Saskatchewan—					
Potatoes.....	86	97	98	93	90
Turnips, mangolds, etc.....	85	87	101	95	94
Corn for fodder.....	78	92	103	93	93
Alfalfa.....	77	82	—	—	88
Alberta—					
Potatoes.....	73	96	102	94	92
Turnips, mangolds, etc.....	88	95	98	93	91
Corn for fodder.....	78	67	107	96	93
Alfalfa.....	65	—	—	—	96
British Columbia—					
Potatoes.....	93	90	92	92	94
Turnips, mangolds, etc.....	89	91	87	95	96
Corn for fodder.....	89	91	97	96	99
Alfalfa.....	91	89	—	—	94

INFLUENCE OF THE WEATHER UPON THE GROWTH OF SPRING WHEAT.

Table I on page 274 presents the data collected from crop correspondents in continuation of the monthly records published in the Bulletin from May to September, 1920. The records of September relate to the dates of cutting. Of the 53 records of first cutting, 30 were for the first week, 16 for the second week, and seven for the third week. Cutting was general during September in the Maritime Provinces and Alberta. Only three records came from Ontario, these being for the third week. In Manitoba there were no records, and in Saskatchewan only seven. The weather has been favourable generally for the completion of cutting, except in British Columbia, where excessive rains caused delay and loss. In Table II, pages 275 and 276, are given the records of cutting for September, 1919 and 1920. Throughout all the provinces, with the exception of Saskatchewan, cutting was completed earlier this year than it was last year.

I. Dates of Cutting of Spring Wheat, 1920.

Province and District.	First Cutting.				Cutting General.				Completion of Cutting.						
	No. of replies.	Sept. 1-7.	Sept. 8-14.	Sept. 15-21.	Sept. 22-30.	No. of replies.	Sept. 1-7.	Sept. 8-14.	Sept. 15-21.	Sept. 22-30.	No. of replies.	Sept. 1-7.	Sept. 8-14.	Sept. 15-21.	Sept. 22-30.
Prince Edward Island.....	4	2	2	-	-	5	2	-	3	-	6	3	-	1	2
Nova Scotia.....	9	7	2	-	-	15	6	4	5	-	28	2	5	16	5
New Brunswick.....	3	3	-	-	-	6	3	2	1	-	11	2	1	5	3
Quebec—															
North.....	6	2	3	1	-	15	4	5	6	-	30	7	3	10	10
South.....	9	5	3	1	-	20	7	4	8	1	31	2	5	13	11
Eastern Townships.....	4	1	2	1	-	10	4	1	4	1	20	3	3	7	7
Montreal Counties.....	-	-	-	-	-	1	-	-	-	-	9	5	2	1	1
Ontario—															
Eastern.....	1	1	-	-	-	-	-	-	-	-	6	2	1	3	-
Central.....	1	-	1	-	-	1	-	-	1	-	4	1	1	2	2
Western.....	1	-	-	1	-	1	-	-	1	-	3	1	1	-	-
Southern.....	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Northern.....	2	-	1	1	-	1	-	7	1	-	4	1	1	1	1
Manitoba—															
Eastern.....	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-
North Central.....	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-
South Central.....	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Northwestern.....	-	-	-	-	-	-	-	-	-	-	16	6	5	3	2
Southwestern.....	-	-	-	-	-	-	-	-	-	-	4	2	1	1	-
Saskatchewan—															
North.....	2	1	1	-	-	5	2	1	2	-	39	15	11	8	5
South.....	-	-	-	-	-	2	1	1	-	-	11	5	2	1	3
Alberta—															
North.....	10	7	1	2	-	15	7	3	4	1	31	4	9	10	8
South.....	1	1	-	-	-	1	1	-	-	-	4	3	-	1	-
British Columbia.....	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-

II. Dates of Cutting of Spring Wheat, 1919 and 1920.

A. DATES OF FIRST CUTTING.

Items.	P.E.I.		N. S.		N. B.		Que.		Ont.	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
No. of records of first cutting.....	11	4	29	9	8	3	31	19	2	5
Sept. 1-7.....	5	2	16	7	5	3	16	8	2	1
Sept. 8-14.....	3	2	9	2	3	—	8	8	—	2
Sept. 15-21.....	2	—	4	—	—	—	7	3	—	2
Sept. 22-30.....	1	—	—	—	—	—	—	—	—	—

Items.	Man.		Sask.		Alberta.		B. C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of first cutting.....	—	—	1	2	4	11	—	—	86	53
Sept. 1-7.....	—	—	—	1	1	8	—	—	45	30
Sept. 8-14.....	—	—	1	1	—	1	—	—	24	16
Sept. 15-21.....	—	—	—	—	3	2	—	—	16	7
Sept. 22-30.....	—	—	—	—	—	—	—	—	1	—

B. DATES OF CUTTING GENERAL.

Items.	P.E.I.		N. S.		N. B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting general.....	14	5	48	15	16	6	55	46	8	3
Sept. 1-7.....	6	2	8	6	3	3	14	15	4	—
Sept. 8-14.....	4	—	13	4	6	2	19	10	4	—
Sept. 15-21.....	4	3	22	5	7	1	20	18	—	3
Sept. 22-30.....	—	—	5	—	—	—	2	3	—	—

Items.	Man.		Sask.		Alberta.		B. C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting general.....	—	—	3	7	10	16	1	—	155	98
Sept. 1-7.....	—	—	2	3	5	8	1	—	43	37
Sept. 8-14.....	—	—	—	2	2	3	—	—	48	21
Sept. 15-21.....	—	—	1	2	2	4	—	—	56	36
Sept. 22-30.....	—	—	—	—	1	1	—	—	8	4

II. Dates of Cutting of Spring Wheat, 1919 and 1920—con.

C. DATES OF COMPLETION OF CUTTING.

Items.	P. E. I.		N. S.		N. B.		Que.		Ont.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting completed.....	17	6	47	28	14	11	107	90	26	18
Sept. 1-7.....	1	3	—	2	—	2	15	17	10	5
Sept. 8-14.....	3	—	2	5	1	1	17	13	4	4
Sept. 15-21.....	9	1	12	16	5	5	43	31	10	6
Sept. 22-30.....	4	2	33	5	8	3	32	29	2	3

Items.	Man.		Sask.		Alberta.		B. C.		Canada.	
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
No. of records of cutting completed.....	22	23	31	50	42	35	5	1	311	272
Sept. 1-7.....	13	11	11	20	8	7	2	—	60	57
Sept. 8-14.....	4	6	9	13	8	9	—	—	48	51
Sept. 15-21.....	4	4	9	9	14	11	1	1	107	84
Sept. 22-30.....	1	2	2	8	12	8	2	—	96	60

CROP REPORTS FROM THE PROVINCES.

Summarized from the Reports of Crop Correspondents, September 30, 1920.

Prince Edward Island.—Rust has seriously reduced the yield of grains. Potatoes were reported as being up to the average at the end of the month, and turnips and other roots a little below. Pastures are not good and the milk flow is poor.

Nova Scotia.—Great destruction has been caused to oats by the army worm, many fields being completely destroyed. Wet weather at harvesting also did damage, causing grain to sprout. In some districts potatoes are very good, but in others rot has commenced. Aphid and club root have lowered the condition of turnips.

New Brunswick.—It is early to give estimates of yields and quality. Crops looked promising when cut, but much cut grain has lain out in the rains and been ruined. Potato rot was becoming general and many potatoes would not be marketable.

Quebec.—The harvest is practically over, and the farmers are well pleased with the exceptional yield of all crops. Hay is not quite so abundant, but it is of good quality. In the eastern and northern parts of the province, mention is made in quite a few instances of rust on wheat and oats. The growth and yield of potatoes were extraordinary, but late rains have damaged them and in certain sections they are badly rotted. Threshing has commenced. Fruits are plentiful, and vegetables are very good.

Ontario.—All grain crops, both in quality and quantity, are extra good, excepting wheat, which was seriously damaged by rust and the Hessian fly. The weather was excellent for the saving of field crops. There is a great abundance of feed. Corn for fodder is the heaviest crop in many years. There is very little threshing done yet, as farm help is scarce. Rain is needed for fall ploughing, as the land is very dry and difficult to work. There is a big yield of potatoes, the early ones are splendid, but great quantities are rotten. No great frosts to date. Lots of fruit wasted through shortage of labour and scarcity of baskets. Apples are very good. Silos are being filled with quantities of good ensilage corn.

Manitoba.—Wet weather has interrupted harvesting and threshing operations, and losses will result from grain sprouting in the stook. The yields, on the whole, however, are fairly satisfactory, except for roots and potatoes, which are very poor. The late rains have improved pastures and promoted good growth on stubble fields, making feed for the cattle. Pigweed is said to be becoming very prevalent in several districts.

Saskatchewan.—Threshing has been delayed owing to the rains, but in many cases where completed the yields were somewhat disappointing. Frost and rust damaged a certain amount of oats, so that the quality is not so good. Root crops are all light, owing to drought earlier in the season. The fodder supply is only fair. Russian thistles are reported as becoming a serious pest.

Alberta.—The wheat crop has yielded beyond all expectations, and the quality is excellent. One report from Lethbridge says "I have an irrigated field of wheat which yielded 40 bushels per acre and tested 65 lb. per bushel at the elevator." Oats and barley have also gone above average, although ripening was a little uneven. Threshing was well advanced at the end of the month. Roots in general are small but free from disease. A correspondent from MacLeod writes: "Alfalfa is the best crop in the district, though, unfortunately, but little grown. I got 13 big loads (15 tons) at the lowest off two acres of unirrigated land in two cuttings."

British Columbia.—All land has produced a good crop, but continuous wet weather during September has resulted in great losses. Much grain has sprouted in the stook, and potatoes and roots have commenced to rot. The apple crop is said to be light.

ANNUAL AGRICULTURAL STATISTICS, 1920.

For the third successive year in all the provinces, and for the fourth successive year in the provinces of Quebec, Saskatchewan, Alberta and British Columbia, the Dominion Bureau of Statistics and the Provincial Governments have jointly collected annual statistics of the areas under field crops and of the numbers of farm live stock. As in previous years, the returns required have been collected from individual farmers through the willing agency of the

rural school teachers and children, except in the province of British Columbia, where the returns have been distributed and collected direct by mail.

The returns actually received form the basis upon which the estimates of totals are established, these being calculated by counties or crop districts according to the proportion which subsists between the number of returns and the total number of farmers.¹ Thus, if returns are made by a third of the farmers in any county or district, the totals of these, when multiplied by three, represent the totals for each crop or description of live stock.

The following statement shows for 1920 the approximate number of farmers in each province, with the number and percentage of the schedules actually returned for the four years 1917 to 1920:

Province.	Number of Farms, 1920.	Number of Returns.				Percentage of Returns.			
		1917	1918	1919	1920	1917	1918	1919	1920
Prince Edward Island.....	13,705	-	7,766	3,770	4,887	-	55	27	36
Nova Scotia.....	53,634	-	20,868	12,136	16,249	-	38	24	30
New Brunswick.....	37,204	-	13,937	6,643	7,266	-	36	17	19.5
Quebec.....	143,958	28,133	34,894	24,735	19,076	21	20	17	13
Ontario.....	184,337	-	79,968	36,213	31,342	-	43	19	17
Manitoba.....	49,855	-	17,808	10,536	16,738	-	88	21	33
Saskatchewan.....	103,912	35,592	46,089	35,531	35,939	34	44	34	34.6
Alberta.....	67,603	14,444	13,574	4,919	14,454	21	20	7	21
British Columbia.....	13,743	6,886	6,534	7,970	8,694	46	42.5	58	60
Total.....	667,951	-	241,438	142,453	154,661	-	36	21.5	23

The proportion of returns received this year, although not equal to that of 1918, is superior to that of last year, all the provinces showing a marked improvement, with the exception of Quebec, which has fallen from 17 to 13 p.c., and Ontario, which has fallen from 19 to 17 p.c. The Maritime Provinces show a marked increase this year as compared with last year, especially Prince Edward Island and Nova Scotia. The Prairie Provinces also show an increase, especially Manitoba and Alberta, where last year the Winnipeg strike caused dislocation of the arrangements. In Saskatchewan, the largest grain province, there is a slight increase this year, and, except in 1918, when the proportion was 44 p.c., the percentage of returns has been maintained uniformly at about 34. British Columbia shows very satisfactory progress; the proportion of 60 p.c. is the highest attained by the province as compared with previous years and is also the highest as compared with the other provinces for any year.

On the whole, the system of collecting acreage and live stock returns from individual farmers through the rural schools appears

¹Except in Ontario, where the estimate is established according to the total area under crops, instead of the total number of farms.

to have given fairly trustworthy results. Next year the schedules to be collected by the decennial census from all farmers of data for the year 1920 will afford a means of ascertaining the accuracy or inaccuracy of the estimates based on the returns received last summer. In any case, it is clear that the present system for the collection of annual agricultural statistics gives more trustworthy results than that which it replaced of estimating from the reports of correspondents in percentages of the previous year, whilst further distinct advantages lie in the use made of the greater knowledge of local conditions possessed by the Provincial Governments and the elimination of conflicting totals as between the Dominion and Provincial statisticians.

The experience of the British Columbia Department of Agriculture points to the possibility of increasing the proportion of returns by the issue of the schedules direct to the farmers instead of indirectly through the rural schools. Although the school teachers and children show praiseworthy energy and zeal, it is difficult to reach farmers who have not children at school and farmers in districts where schools have not yet been established. It is hoped that during the forthcoming winter it may be possible to convene a conference on Agricultural Statistics between representatives of the Dominion Bureau and of the Provincial Governments. If so, the existing arrangements can be carefully reconsidered in the light of the experience acquired during the last four years.

NUMBERS OF FARM LIVE STOCK IN CANADA, 1920.

The Dominion Bureau of Statistics issued (November 3) a report showing the number of each description of farm live stock in Canada on June 15 last, as estimated from returns collected by the Bureau from individual farmers throughout Canada in conjunction with the Provincial Governments. The total number of horses in Canada on June 15 this year is estimated at 3,400,352, as compared with 3,667,369 in 1919. Mules number 9,055, as against 15,102 last year. Cattle number 9,477,380, as compared with 10,085,011 in 1919, including milch cows 3,530,238, as compared with 3,548,437; sheep 3,720,783, as compared with 3,421,958, and swine 3,516,678, as compared with 4,040,070. The total head of poultry is 30,505,819, as compared with 34,645,238 in 1919, the different descriptions in 1920 being hens 25,942,105, turkeys 791,766, geese 754,455, and ducks 617,638. Rabbits, all in British Columbia, number 82,146, as against 83,050 in 1919.

For all descriptions of farm live stock, excepting sheep, the numbers this year are less than last year. Sheep, which for so many years before 1917 were declining in numbers, show a further satisfactory increase, the number, 3,720,783, constituting an advance of 298,825 over last year's record total of 3,421,958. By provinces, Prince Edward Island shows an increase over the numbers of last year for all descriptions. In the other provinces, horses show a decrease, as com-

pared with last year, in all provinces except British Columbia, where the number is 44,070, as compared with 43,717. Cattle show a decrease in all provinces. Sheep have increased in all provinces excepting Manitoba, and swine have decreased in all provinces excepting Prince Edward Island. Poultry, including all descriptions, have increased in Prince Edward Island, Manitoba, and British Columbia, but have declined in Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, and Alberta.

I. Numbers of Farm Live Stock in Canada by Provinces, 1919 and 1920.

CLASSIFICATION.—Horses: Stallions, Mares and Geldings 2 years old and over; Colts and fillies, under 2 years. CATTLE: Bulls for breeding; Milch cows; Calves, under 1 year; Steers, 2 years old and over. All other cattle.

Province.	1919.	1920.	Province.	1919.	1920.
Canada—	No.	No.	P.E. Island—con.		
Horses—			Sheep.....	114,955	128,529
Stallions.....	49,084 ¹	44,401 ¹	Swine.....	49,510	49,917
Mares.....	1,634,724	1,504,462	Poultry—		
Geldings.....	1,366,677 ²	1,315,968 ²	Hens.....	575,647	611,399
Colts and fillies.....	616,884	535,521	Turkeys.....	9,388	6,482
	3,667,369	3,400,352	Geese.....	26,544	22,664
Mules.....	15,102	9,055	Ducks.....	13,134	9,282
Cattle—			Total.....	624,713	649,817
Bulls.....	300,471	279,659	Nova Scotia—		
Milch cows.....	3,548,437	3,530,238	Horses—		
Calves.....	2,424,229	2,141,954	Stallions.....	1,718	1,226
Steers.....	840,319	782,132	Mares.....	35,972	36,244
Other cattle.....	2,971,555	2,743,397 ³	Geldings.....	27,056	26,635
Total.....	10,085,011	9,477,380	Colts and fillies.....	4,843	3,748
Sheep.....	3,421,958	3,720,783	Total.....	69,589	67,853
Swine.....	4,040,070	3,516,678	Cattle—		
Poultry—			Bulls.....	6,806	5,979
Hens.....	31,785,722	25,942,105	Milch cows.....	162,230	170,308
Turkeys.....	839,711 ⁴	791,766 ⁴	Calves.....	82,481	79,379
Geese.....	802,869 ⁴	754,455 ⁴	Steers.....	50,643	43,936
Ducks.....	777,692 ⁴	617,638 ⁴	Other cattle.....	103,901	98,859
Total.....	34,645,238 ⁵	30,505,819 ⁵	Total.....	406,061	398,461
Rabbits (British Columbia only).....	83,050	82,146	Sheep.....	261,529	403,567
P. E. Island—			Swine.....	69,982	57,950
Horses—			Poultry—		
Stallions.....	75	80	Hens.....	813,715	805,328
Mares.....	17,851	18,630	Turkeys.....	7,903	6,283
Geldings.....	12,455	13,427	Geese.....	15,796	16,532
Colts and fillies.....	4,195	3,432	Ducks.....	17,545	10,543
Total.....	34,576	35,569	Total.....	854,959	838,686
Cattle—			New Brunswick—		
Bulls.....	3,708	4,958	Horses—		
Milch cows.....	45,662	49,932	Stallions and geldings.....	32,027	32,894
Calves.....	32,589	36,297	Mares.....	38,685	38,242
Steers.....	4,299	5,277	Colts and fillies.....	7,116	5,601
Other cattle.....	39,219	42,679	Total.....	77,828	76,737
Total.....	125,477	139,143			

¹ Excluding stallions in New Brunswick. ² Including stallions in New Brunswick. ³ Including 145,659 cows suckling calves in Alberta. ⁴ Not including Alberta. ⁵ Including 439,244 other than hens in Alberta. ⁶ Including 2,399,855 poultry of all kinds in Alberta.

I. Numbers of Farm Live Stock in Canada by Provinces, 1919 and 1920—con.

Province.	1919.	1920.	Provinces.	1919.	1920.
New Brunswick—con.			Ontario—con.		
Cattle—			Poultry—		
Bulls.....	12,370	11,226	Hens.....	10,573,506	10,030,872
Milch cows.....	153,058	147,760	Turkeys.....	327,802	267,883
Calves.....	83,857	70,737	Geese.....	426,663	395,238
Steers.....	25,163	26,049	Ducks.....	377,838	311,652
Other cattle.....	90,574	77,216	Total.....	11,705,809	11,005,645
Total.....	365,022	332,988			
Sheep.....	212,745	280,090	Manitoba—		
Swine.....	104,939	92,925	Horses—		
Poultry—			Stallions.....	1,500	1,500
Hens.....	729,619	701,987	Mares.....	161,274	158,114
Turkeys.....	30,627	22,192	Geldings.....	144,470	141,246
Geese.....	24,396	20,142	Colts and fillies.....	72,112	55,768
Ducks.....	12,056	8,913	Total.....	379,356	356,628
Total.....	796,698	753,234			
Quebec—			Cattle—		
Horses—			Bulls.....	19,021	16,734
Stallions.....	14,068	9,040	Milch cows.....	227,872	221,785
Mares.....	213,192	196,043	Calves.....	207,577	177,272
Geldings.....	184,132	170,793	Steers.....	91,065	83,769
Colts and fillies.....	52,510	57,323	Other cattle.....	236,236	258,414
Total.....	463,902	433,199	Total.....	781,771	757,974
Cattle—			Sheep.....	167,170	156,716
Bulls.....	122,232	119,394	Swine.....	261,542	212,542
Milch cows.....	1,056,347	1,030,809			
Calves.....	494,060	449,394	Poultry—		
Steers.....	92,296	75,431	Hens.....	2,429,908	3,100,000
Other cattle.....	504,709	457,184	Turkeys.....	157,518	145,000
Total.....	2,269,644	2,132,212	Geese.....	61,025	64,500
Sheep.....	1,007,425	1,031,982	Ducks.....	82,715	64,000
Swine.....	935,425	836,431	Total.....	2,731,166	3,373,500
Poultry—			Saskatchewan—		
Hens.....	3,457,480	3,177,402	Horses—		
Turkeys.....	118,904	114,377	Stallions.....	15,002	12,018
Geese.....	124,380	130,384	Mares.....	476,289	383,300
Ducks.....	108,206	115,697	Geldings.....	393,802	369,518
Total.....	3,808,970	3,537,860	Colts and fillies.....	193,359	174,969
Ontario—			Total.....	1,078,452	939,805
Horses—			Mules.....	14,522	8,475
Stallions.....	4,087	3,902			
Mares.....	354,677	351,517	Cattle—		
Geldings.....	269,390	266,477	Bulls.....	30,714	27,534
Colts and fillies.....	91,415	82,744	Milch cows.....	374,062	354,507
Total.....	719,569	704,640	Calves.....	364,336	326,308
Cattle—			Steers.....	135,915	130,748
Bulls.....	63,189	65,757	Other cattle.....	474,536	484,965
Milch cows.....	1,141,016	1,170,010	Total.....	1,379,563	1,324,062
Calves.....	688,850	655,316	Sheep.....	146,911	160,918
Steers.....	260,204	245,706	Swine.....	432,367	321,900
Other cattle.....	773,932	745,038			
Total.....	2,927,191	2,881,827	Poultry—		
Sheep.....	1,101,740	1,129,084	Hens.....	8,079,351	6,217,518
Swine.....	1,695,487	1,614,356	Turkeys.....	179,852	221,691
			Geese.....	112,103	92,743
			Ducks.....	144,221	75,188
			Total.....	8,515,527	6,607,140

I. Numbers of Farm Live Stock in Canada by Provinces, 1919 and 1920—con.

Province.	1919.	1920.	Province	1919.	1920.
Alberta—			British Columbia—		
Horses—			Horses—		
Stallions.....	11,806	15,810	Stallions.....	828	825
Mares.....	318,050	303,531	Mares.....	18,734	18,841
Geldings.....	286,191	277,250	Geldings.....	17,154	17,728
Colts and fillies.....	184,333	145,260	Colts and fillies.....	7,001	6,676
Total.....	800,380	741,851	Total.....	43,717	44,070
			Mules.....	580	580
Cattle—			Cattle—		
Bulls.....	38,274	26,384	Bulls.....	4,157	1,693
Milch cows.....	336,596	305,607	Milch cows.....	51,594	79,520
Calves.....	428,888	321,547	Calves.....	41,591	25,704
Steers.....	180,734	171,216	Steers.....	—	—
Other cattle.....	599,552	531,187	Other cattle.....	148,896	47,855
Total.....	1,584,044	1,355,941	Total.....	246,238	154,772
Sheep.....	364,498	383,424	Sheep.....	44,985	46,473
Swine.....	445,858	286,556	Swine.....	44,960	44,101
Poultry—			Poultry—		
Hens.....	3,987,131	2,399,855	Hens.....	1,139,365	1,297,599
Turkeys.....	439,244		Turkeys.....	7,717	7,858
Geese.....			Geese.....	11,962	12,262
Ducks.....			Ducks.....	21,977	22,363
Total.....	4,426,375	2,399,855	Total.....	1,181,021	1,340,082
			Rabbits.....	83,050	82,146

II.—Estimated Numbers of Farm Live Stock, 1915-1920.

Live Stock.	1915.	1916.	1917.	1918.	1919.	1920.
Canada—	No.	No.	No.	No.	No.	No.
Horses.....	2,996,099	3,258,342	3,412,749	3,609,257	3,667,369	3,400,352
Milch cows.....	2,666,846	2,833,433	3,202,283	3,538,600	3,548,437	3,530,238
Other cattle.....	3,399,155	3,760,718	4,718,657	6,507,267	6,536,574	5,947,142
Total cattle.....	6,066,001	6,594,151	7,920,940	10,045,867	10,085,011	9,477,380 ¹
Sheep.....	2,038,662	2,022,941	2,369,358	3,052,748	3,421,958	3,720,783
Swine.....	3,111,900	3,474,840	3,619,382	4,289,682	4,040,070	3,516,678
Prince Edward Island—						
Horses.....	36,898	38,562	38,948	32,620	34,576	35,569
Milch cows.....	47,043	46,032	46,032	41,429	45,662	49,932
Other cattle.....	59,503	57,260	54,970	69,092	79,815	89,211
Total cattle.....	106,546	103,292	101,002	110,521	125,477	139,143
Sheep.....	86,640	88,797	90,573	73,046	114,955	128,529
Swine.....	40,792	38,300	35,236	40,814	49,510	49,917
Nova Scotia—						
Horses.....	63,244	64,193	64,193	70,101	69,589	67,853
Milch cows.....	128,814	130,141	131,442	157,829	162,230	170,308
Other cattle.....	144,458	140,673	135,046	249,422	243,831	228,153
Total cattle.....	273,272	270,814	266,488	407,251	406,061	398,461
Sheep.....	205,542	200,979	200,979	259,847	261,529	403,567
Swine.....	53,402	51,928	49,850	68,238	69,982	57,950
New Brunswick—						
Horses.....	65,827	65,169	65,169	66,590	77,828	76,737
Milch cows.....	101,665	100,221	100,221	120,123	153,058	147,760
Other cattle.....	96,437	92,223	89,456	166,624	214,964	185,228
Total cattle.....	198,102	192,444	189,677	286,747	365,022	332,988
Sheep.....	111,026	105,967	103,877	140,015	212,745	280,090
Swine.....	72,533	70,683	69,269	79,814	104,939	92,925

¹Including 145,659 cows suckling calves (Alberta).

II.—Estimated Numbers of Farm Live Stock, 1915-1920—concluded.

Live Stock.	1915.	1916.	1917.	1918.	1919.	1920.
Quebec—						
Horses.....	372,567	332,628	379,276	496,811	463,902	433,199
Milch cows.....	720,420	639,805	911,023	1,163,865	1,056,347	1,030,809
Other cattle.....	612,500	535,693	958,010	1,245,819	1,213,297	1,101,403
Total cattle.....	1,332,920	1,175,498	1,869,033	2,409,684	2,269,644	2,132,212
Sheep.....	554,491	497,711	849,143	959,070	1,007,425	1,031,982
Swine.....	632,729	531,303	712,087	997,255	935,425	836,431
Ontario—						
Horses.....	903,527	896,208	887,246	732,977	719,569	704,640
Milch cows.....	1,077,808	1,082,119	1,082,119	1,097,039	1,141,016	1,170,010
Other cattle.....	935,606	901,924	865,947	1,770,683	1,786,175	1,711,817
Total cattle.....	2,013,414	1,984,043	1,947,966	2,867,722	2,927,191	2,881,827
Sheep.....	611,789	589,581	595,477	972,341	1,101,740	1,129,084
Swine.....	1,469,573	1,404,618	1,236,064	1,656,386	1,695,487	1,614,356
Manitoba—						
Horses.....	317,847	324,175	324,175	384,772	379,356	356,628
Milch cows.....	157,494	196,288	202,177	225,659	227,872	221,785
Other cattle.....	246,603	357,870	357,870	521,240	553,899	536,189
Total cattle.....	404,097	554,158	560,047	746,899	781,771	757,974
Sheep.....	50,880	76,750	80,588	136,782	167,170	156,716
Swine.....	163,308	205,898	175,013	284,596	261,542	212,542
Saskatchewan—						
Horses.....	630,062	841,907	880,301	990,009	1,078,452	939,805
Milch cows.....	211,684	322,185	354,430	352,989	374,062	354,507
Other cattle.....	543,609	689,208	856,687	926,342	1,005,501	969,555
Total cattle.....	755,293	1,011,393	1,211,090	1,279,331	1,379,563	1,324,062
Sheep.....	133,311	124,237	127,892	134,177	146,911	160,918
Swine.....	411,324	530,727	573,938	521,240	432,367	321,900
Alberta—						
Horses.....	544,772	634,188	718,317	791,246	800,380	741,851
Milch cows.....	183,974	277,324	325,861	328,702	336,596	305,607
Other cattle.....	660,000	882,766	1,209,433	1,362,880	1,247,448	1,050,334
Total cattle.....	843,974	1,160,090	1,535,294	1,691,582	1,584,044	1,355,941
Sheep.....	238,579	292,620	276,966	323,179	364,498	383,424
Swine.....	229,696	603,554	730,237	601,534	445,858	286,556
British Columbia—						
Horses.....	61,355	61,312	55,124	44,131	43,717	44,070
Milch cows.....	37,944	39,318	49,005	50,965	51,594	79,520
Other cattle.....	100,439	103,101	191,338	195,165	194,644	75,252
Total cattle.....	138,383	142,419	240,343	246,130	246,238	154,772
Sheep.....	46,404	46,269	43,858	45,291	44,985	46,473
Swine.....	38,543	37,829	37,688	39,805	44,960	44,101

¹ Including 145,659 cows suckling calves (Alberta).

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The temperatures recorded during September range a little higher than normal. With the exception of a cool spell from the 17th to the 20th, when hoar frost was in evidence each morning, the weather was quite warm and humid up to the 26th, when it turned a little cooler, and there were thunder storms and much rain. The highest reading of the thermometer for the month is 86·2, and the lowest 31·4, while the mean temperature is 61·10, compared with a maximum of 83·8 and a minimum of 35 and a mean of 58·62 for this period a year ago. The precipitation, which was recorded on thirteen different days, totals 4·10 inches, as

against 2.48 inches, recorded on sixteen days for the corresponding period in 1919, and a September average of 3.01 inches for the nine previous years. The bright sunshine averages 7.52 hours a day, as compared with 6.05 hours a day for this time last year.

At the Central Farm, there was cut early in September the second crop of clover from an area of about thirty-three acres, the yield averaging about one ton to the acre. The cutting of Indian corn, which was begun about the middle of the month, has been practically completed by the 30th, the return from over 60 acres running slightly more than 17 tons to the acre. Root prospects have continued to improve, and an abundant crop is promised.

Charlottetown, P.E.I.—J. A. CLARK, Superintendent, reports: "The wet weather during the first half of September, while greatly delaying harvesting, made it possible to complete most of the fall ploughing and other autumn work on the land. The grain, while much discoloured, was not so badly injured as most people anticipated, and was eventually stored in fairly good condition. Roots have improved greatly during the damp weather. Early potatoes have turned out well and fairly sound. This year Indian corn will make first-class ensilage. Harvesting was practically completed by the 23rd. Light frosts on low areas were reported on the 19th and 21st, but no damage to potatoes or garden crops generally has resulted. Pastures have continued very good, so that live stock is in splendid shape at the present time."

Kentville, N.S.—W. S. BLAIR, Superintendent, reports:—"The weather most of the time during September has been fine, with rather higher readings of the thermometer than usual, the mean temperature being 58.55, compared with an average mean of 57.46 for the corresponding period of the six years from 1914 to 1919. The precipitation totals 2.99 inches, of which 1.38 inch was recorded on the 14th and 15th; while the average for the six previous years was 3.32 inches. The bright sunshine aggregates 169.50 hours, while from 1914 to 1919 the average for September was 180.16 hours. Grain, on the whole, has given about an average crop, the fine spell during the second week aiding materially in the harvesting of the later-sown cereals. Indian corn matured rapidly and yielded a crop of excellent quality. Apples coloured well, and the latter part of the month has been very favourable for their harvesting, which is much in advance of previous years."

Nappan, N.S.—W. W. BAIRD, Superintendent, reports:—"The temperatures and precipitation recorded during September are about normal for this time of the year, but less sunshine than usual has been recorded, the early part of the month having been very wet and cloudy. This dull spell, coming in the midst of harvesting and being accompanied by relatively high temperatures, resulted in much damage to hay and grain, while blight appeared on practically all late planted potatoes. The weather became fine on the 17th, and, as it remained so until the close of the month, an opportunity has been

afforded farmers to gather in their grain and the balance of their hay. A touch of frost, which occurred on the 21st, slightly damaged tender vegetables. At the Experimental Farm, 35.5 bushels have been threshed from an acre of Early Red Fife wheat, and plots of Banner oats have given a yield at the rate of 127 bushels to the acre. Conditions have been ideal for forage crops. Sunflowers grown for ensilage have yielded at the rate of 25 tons to the acre, while a five-acre field of Longfellow corn has averaged 16.1 tons per acre. Some of the variety test plots of Indian corn have yielded as high as 23 tons to the acre."

Fredericton, N.B.—W. W. HUBBARD, Superintendent, reports: "The weather for September, from a harvest standpoint, has been very unfavourable, except where grain was cut very early. A heavy rain occurred on August 30, and from that date till September 15 there was not sufficient sun to dry grain, the cloudy days and the high temperatures accompanying the same, making conditions for grain and potatoes very poor. Although, at the Station, the precipitation for the month, 3.43 inches, is not an unusual amount, at the University Observatory, only two miles distant, the rainfall was 6.80 inches; and the gloomy, saturated atmosphere extended over a large part of the province. Consequently, harvesting and threshing have been much delayed, a considerable portion of the grain has shelled in the field, and more or less of the latter has sprouted, while a great deal of the potato crop is affected by rot. Corn and roots look well; but work is backward on account of weather conditions. Apples have suffered somewhat in point of colour from the absence of sunshine. Pastures are good and live stock is doing well."

Ste. Anne de la Pocatière, Que.—JOS. BEGIN, Superintendent, reports: "The temperatures recorded during September range eight degrees higher than for the corresponding period a year ago, the mean being 55.3 as against 47.6, and the highest 82.7 and lowest 33.8, compared with extremes of 74.2 and 32.8 in 1919. The precipitation amounts to 5.89 inches, distributed over sixteen days, while for this time last year the rainfall totalled 6.60 inches, spread over twenty different days. There has been a little more sunshine than recorded during this time last year. Very fine weather has alternated with wet spells, and, during the latter, the unthreshed grain in the field has been damaged to a certain extent. On the whole, the grain crop is good and has been well saved, although a considerable part of it had been rather too long in the field before being taken in. This year there is less straw than usual, and its quality for feed is inferior. Potatoes promise to be a good crop throughout the East, and growers seem very anxious to save it without delay lest disease, which is just appearing, affects it seriously."

Cap Rouge, Que.—G. A. LANGEIER, Superintendent, reports: "September has been warmer, drier, and duller than the average of the corresponding period of the last eight years, the figures being,

respectively, 57.95 and 54.78 for the mean temperature, 3.37 and 4.63 inches for precipitation, and 121.8 and 148.9 hours for bright sunshine. The crops have been better than usual in the district, and the weather for harvesting has been fine. At the Station, all grain, with the exception of buckwheat, has been threshed, while potatoes have been dug and two-thirds of the Indian corn is in the silos."

Lennoxville, Que.—J. A. McCLARY, Superintendent, reports: "The highest temperature recorded during September is 86, the lowest 25, and the mean 56.59, compared with a maximum of 83, a minimum of 26 and a mean of 54.81 last year. The precipitation totals 4.70 inches, while a year ago it amounted to 4.31 inches. The bright sunshine aggregates 152.5 hours, as against 138.2 hours for the previous September. The weather in the early part of the month was quite cool and cloudy. The rainfall during the week beginning with the 12th totalled 1.94 inch. The thermometer dropped to 25 during the night of the 20th. Then followed a spell of fine warm weather. There was not enough frost to hurt the corn, which, at the close of the month, is practically all in the silos. The grain has been harvested, while the potato crop is nearly all dug, with an average yield and with only a small percentage affected by rot."

Brandon, Man.—W. C. McKILLICAN, Superintendent, reports: "While the aggregate rainfall for September is not particularly heavy, there have been many wet days during the month. Temperatures have been moderate, no frost being recorded until the 29th when the thermometer dropped to 30. Conditions have been unfavourable for threshing, as, with showers every few days, it has been almost impossible to get the grain dry enough to thresh it, and much of the threshing throughout the province remains to be attended to. Corn and roots are exceptionally good crops. Several farmers in the Brandon district have tried the growing of sunflowers for ensilage, and they report large yields. A considerable number of silos have been built this year. At the Experimental Farm, threshing, which had been nearly all completed in August, was finished on the 7th and 8th of September. The corn and sunflower crops have been cut and put in the silos. Potatoes have been dug and a good start has been made at harvesting the large crop of mangolds. Some fall ploughing and some manure spreading have also been done."

Indian Head, Sask.—N. D. MACKENZIE, Superintendent, reports: "During September weather conditions generally have been fairly satisfactory. Rather heavy showers have delayed threshing somewhat, but the bulk of this work with wheat has been completed and probably 60 p.c. of that with oats and barley. At the Experimental Farm, the wheat and barley yields are well up to those of last year, but are at least ten bushels lower than a year ago in the case of oats. Corn and sunflowers are cut and in the silo, the yields

being less than usual. Potatoes, which have been dug, are a good crop, and the tubers are clean."

Rosthern, Sask.—Wm. A. MUNRO, Superintendent, reports:—"September was without any record of frost until the 29th, when the temperature went down to 28·3. This means that practically all the vegetables came to maturity and also the field root crops and the corn. Wheat, oats and barley are of splendid quality and should be very satisfactory for seed. Except for a rain on the 22nd, threshing has not been interrupted."

Scott, Sask.—M. J. TINLINE, Superintendent, reports: "The weather during September has been warm, the mean temperature, 51·7, being above the average. There has been more bright sunshine than usual for this season of the year. Frosts kept off well, the first in September occurring on the 19th. During the early part of the month, threshing was delayed owing to the wet weather in late August. Rain on the 11th, and again on the 23rd and 24th, checked harvesting and threshing operations; so that, at the end of the month, there is, approximately, only 40 p.c. of the threshing done in the district. Crop yields are fair, and wheat, for the most part, is grading No. 2 and No. 3 Northern. At the Station, threshing has just been completed—wheat on one of the fields yielding 27 bushels per acre, and, on the plots, 40 bushels, and Banner oats 58 bushels per acre. The potato crop is being harvested and, as a rule, it is turning out well, the yields running considerably over two hundred bushels per acre."

Lacombe, Alberta.—F. H. REED, Superintendent, reports:—"The prolonged drought of the summer has remained practically unbroken during September. An inch and one-half of rain fell in showers towards the end of the month, but this has not been sufficient to start growth in grass or any second growth in grain fields. Pastures are brown and bare; milk yields are low; and stock will go into winter quarters in rather poor shape. Conditions have been favourable for harvesting, and probably three-quarters of the threshing in the Lacombe district has been completed. The straw is short but the grade of all grains is high and yields are remarkably good. At the Station, oats grown on forty acres of stubble average 71·25 bushels to the acre; barley, from an area of forty-one acres, averages 36·5 bushels; while Ruby and Marquis wheats from smaller areas have yielded at the rates of 26 and 30·5 bushels per acre, respectively."

Lethbridge, Alberta.—W. H. FAIRFIELD, Superintendent, reports:—"September has been unusually dry, the precipitation amounting to only 0·05 of an inch. Although the drought has made conditions unfavourable for fall grain and is making autumn ploughing impossible, the fine weather has facilitated threshing. In southern Alberta, where over 75 p.c. of the threshing has been completed, the grain is not yielding so well as was expected. In this

district, the potato crop is a poor one. The first frost of the season occurred on the 19th."

Invermere, B.C.—R. G. NEWTON, Acting Superintendent, reports:—"The weather during September has been rather dull, and there has been considerable wind at times. Rain has fallen on thirteen different days, giving a total precipitation of 0.86 of an inch, which is below the average of the past few years. All farm crops have been harvested in good condition, and the yields are well up to the average. Frost has done no particular damage to vegetables this season. Potatoes, which are being dug early this season on account of the heavy frost a year ago, are turning out exceptionally well."

Summerland, B.C.—R. H. HELMER, Superintendent, reports:—"September has been cool, with more rain than usual. This has helped farmers in their fall ploughing, as the land was too dry for the purpose previously. Crops are being harvested. Potatoes are not turning out so well as in previous years. The apple harvest is in full swing, but the crop is not coming up to the yield of a year ago. The very short growing season has kept down the size of the apples, and even where light crops are reported, apples have not sized up well. Rains have improved the roads, which, wherever they have been dragged, are in good condition. Corn and hemp for seed are not ripening very satisfactorily."

Agassiz, B.C.—W. H. HICKS, Superintendent, reports:—"The first week of September saw a continuation of the dry, bright weather experienced during August. On the 8th, however, rain commenced, which continued practically without ceasing until the 27th, the precipitation totalling 12.42 inches, which is a record for September, the nearest approach to it being 8.4 inches in 1905. Pasture and root crops have revived greatly and are growing well. There is danger of potatoes rotting in the ground if not harvested soon. A large amount of grain in the stook throughout the Fraser Valley is practically spoiled. Only about 50 p.c. of the threshing has been completed. Very little corn, which is a good crop, has been ensiled as yet. The very wet weather, naturally, has been most unwelcome to exhibition associations."

Sidney, Vancouver Island, B.C.—LIONEL STEVENSON, Superintendent, reports:—"Weather conditions during September have been very unfavourable for general agriculture. More rain fell during the month than usual, and considerable difficulty has been experienced by all land workers in saving grain, orchard, and truck crops. More ploughing than usual has been done in preparation for autumn seeding. Pastures have improved greatly, and abundant autumn pasture is assured. Live stock is in good condition. Poultry continues in demand, at high prices. The agricultural exhibitions have been well attended and have been in every way successful."

Meteorological Record for September, 1920.

The records of temperature, precipitation and sunshine at the Experimental Farms and Stations for the month of September are given in the following table:—

Experimental Farm or Station at—	Degrees of Temperature F.			Precipitation in inches.	Hours of Sunshine.	
	Highest.	Lowest.	Mean.		Possible.	Actual.
Ottawa, Ont.....	86.20	31.40	61.10	4.10	376	225.7
Charlottetown, P.E.I.....	83.00	39.00	57.85	3.76	376	150.7
Kentville, N.S.....	82.00	33.00	58.55	2.99	376	169.5
Nappan, N.S.....	78.00	31.00	57.43	2.21	376	135.7
Fredericton, N.B.....	87.00	31.50	57.10	3.43	376	124.5
Ste. Anne de la Pocatière, Que.....	82.70	33.80	55.30	5.89	377	149.2
Cap Rouge, Que.....	81.00	32.00	57.95	3.37	376	121.8
Lennoxville, Que.....	86.00	25.00	56.59	4.70	376	152.5
Brandon, Man.....	85.00	30.00	54.80	1.51	378	173.8
Indian Head, Sask.....	88.00	21.00	53.13	2.17	375	171.5
Rosthern, Sask.....	82.20	28.30	53.22	1.59	378	239.8
Scott, Sask.....	81.00	27.00	51.70	1.49	378	221.3
Lacombe, Alberta.....	86.30	24.10	50.94	1.56	375	202.0
Lethbridge, Alberta.....	82.50	22.00	53.00	0.05	378	253.6
Invermere, B.C.....	82.00	29.00	51.05	0.86	379	179.1
Summerland, B.C.....	82.00	40.00	57.60	1.51	378	186.3
Agassiz, B.C.....	82.00	41.00	56.28	12.42	378	80.4
Sidney, Vancouver I., B.C.....	60.90	48.00	54.50	2.96	377	141.8

October 16, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Ministry of Agriculture reports (October 1) that on the whole September was a favourable month, being generally fairly dry, and the grain harvest proceeded without serious delay, while good progress was made with autumn cultivation in the earlier districts. The wheat harvest was late in all parts of the country; but, except in the hilly districts, only a small proportion of the crops was still in the fields at the end of September. The crops, especially barley, ripened slowly and even in the earliest districts a certain proportion of the barley has not yet been carted, and here and there some remains to be cut. Owing to the late harvest, potato lifting is backward, but in Lincolnshire and the counties in the south good progress has been made. In Lancashire and Yorkshire lifting of the main crop is not yet general. There is a good deal of disease, especially in the southwest of England. The yield per acre is expected to prove from 5 to 10 p.c. below average. Root crops have grown fairly well during September, but the yields over the whole country will be below average.

Scotland.—The Board of Agriculture reports (October 1) that throughout the greater part of Scotland the weather was unfavourable

for harvest work until last week. Harvesting began about September 1, and was not generally complete at the end of the month. Potatoes are free from disease in most parts of the country and the average yield per acre is estimated at 7 tons (261 bushels).

New Zealand.—According to a preliminary report by the Government Statistician, dated September 14, the following are the areas and yields in bushels of the principal field crops in New Zealand for the season 1919–20, as compared with that of 1918–19 in brackets: Wheat 4,575,986 (6,567,629); oats 6,820,810 (6,884,609); barley 796,191 (710,932); corn 400,711 (413,595). In addition, the yields for chaff, hay or ensilage are in tons: Wheat 2,924 (2,554); oats 455,198 (461,739); barley 1,182 (938); corn for ensilage 2,978 (1,378). The yield of rye grass is 12,761,518 lb. (12,923,886), and of cocksfoot 2,293,009 lb. (3,761,814). Potatoes yield 5,293,000 bushels (3,605,000). An interim report places the numbers of live stock in the Dominion in 1920 as follows, the figures within brackets being the final estimates of 1919: Horses 344,248 (363,188); dairy cows 882,854 (826,135); total cattle 3,059,445 (3,035,478); sheep 23,914,506; (25,828,554); swine 259,647 (235,347).

France.—According to official estimates, the yield of wheat this year is 230,416,000 bushels, as against 178,000,000 bushels last year, of rye 31,500,000 bushels, as against 36,411,000, of barley 35,383,000 bushels, as against 23,633,000, of oats 273,242,000 bushels, as against 157,562,000.—*Broomhall's Corn Trade News*, September 28, 1920.

Germany.—The yield of wheat in Prussia is estimated at 25·5 bushels per acre, as against 26·5 bushels last year; whilst rye has yielded 18·3 bushels, as against 22. The Imperial Grain Board describes the outlook for cereals as gloomy, for the smaller yields have been obtained from a smaller area than that on which the 1919 crops were harvested. The Board states that fully 72,000,000 bushels of bread grain will have to be imported.—*Broomhall's Corn Trade News*, September 21, 1920.

Czecho-Slovakia.—The Board of Trade Journal of October 7 gives the following estimate of this year's harvest, as published by the Czecho-Slovakian Bureau of Statistics: Winter wheat 8,465,000 bushels (9,510,000); spring wheat 2,018,000 (998,000); winter rye 18,075,000 (22,522,000); spring rye 313,000 (191,000); winter barley 139,000 (113,000); spring barley 12,342,000 (12,710,000); oats 26,514,000 (29,881,000). The figures within brackets represent the yields of 1919.

Rumania.—It is estimated by the Rumanian Ministry of Agriculture that one million tons of barley, 500,000 tons of oats and 500,000 tons of maize, the latter being the surplus from the harvest of 1919, will be available for export. There is no exportable surplus of wheat and rye.

United States.—The October Crop Report of the United States Department of Agriculture gives the following estimates of the acre-

age, condition and yield of the principal field crops of the United States for 1920, with comparative figures for 1919, as follows:—

Crops.	Area.		Condition.		Yield per Acre.		Total Yield.	
	1920.	Per cent of 1919.	Oct. 1, 1920.	Ten years average.	1919.	1920 pre-liminary.	1919 final estimate.	1920 pre-liminary.
	000 acres.	000 acres.	p.c.	p.c.	bush. per acre.	bush. per acre.	000 bushels.	000 bushels.
Corn.....	103,648	101.5	89.1	74.8	28.6	31.0	2,917,450	3,216,192
Winter wheat....	34,165	68.5	—	—	14.7	15.6	731,636	532,641
Spring wheat....	19,487	83.5	—	—	9.0	11.2	209,351	218,007
All wheat.....	53,652	73.3	—	—	12.8	14.0	940,987	750,648
Oats.....	41,032	96.8	—	—	29.4	35.2	1,248,310	1,444,362
Barley.....	7,437	100.2	—	—	22.3	25.7	165,719	191,386
Rye.....	5,470	77.4	—	—	12.5	14.2	88,478	77,893
Buckwheat.....	752	95.2	85.6	78.9	20.6	20.7	16,301	15,532
White potatoes...	3,849	95.9	82.7	72.3	89.2	107.8	357,901	414,986
Sweet potatoes...	1,022	99.3	87.1	81.0	100.7	101.5	103,579	103,779
Flax.....	1,706	101.4	62.8	69.8	5.3	6.9	8,919	11,704
Rice.....	1,346	123.5	88.1	86.0	37.7	38.9	41,059	52,298
					lb.	lb.	lb.	lb.
Tobacco.....	1,860	97.8	83.3	81.7	730.8	795.2	1,389,458	1,478,788
							bales	bales
Cotton.....	35,504	101.1	—	—	161.5	165.0	11,330	12,123
					tons	tons	tons	tons
Hay, tame.....	56,813	100.8	—	—	1.62	1.55	91,326	88,171
Hay, wild.....	16,017	102.1	—	—	1.11	1.14	17,340	18,280
Sugar beets.....	978	109.9	93.4	88.3	9.27	9.20	6,421	8,970

The total yield of corn is 3,216,192,000 bushels, as compared with 2,917,450,000 bushels last year, of wheat 750,648,000 bushels, as against 940,987,000 bushels, and of oats 1,444,362,000 bushels, as against 1,248,310,000 bushels. Potatoes are estimated to yield 414,986,000 bushels, as against 357,901,000 bushels last year. The price in cents per bushel of the principal cereals on October 1, as compared with the same date in 1919, is as follows, the prices of last year being placed within brackets: Wheat 214.3 (209.6), corn 121.3 (153.9), oats 60.7 (68.4), barley 91.2 (115.3), rye 162.3 (135.8), buckwheat 159.4 (162.0), potatoes 134.8 (164.2), flax 279.7 (438.2), tame hay \$20.05 (\$20.54), wild hay (six States) \$12.93 (\$15.90).

INTERNATIONAL INSTITUTE OF AGRICULTURE.

Cereal Production in Northern Hemisphere.—The September issue of the "International Crop Report and Agricultural Statistics" brings up to date the estimates given last month of the production in 1920 for wheat, rye, barley, and oats in countries of the northern hemisphere. The totals are given in Table I.

I.—Yield of Wheat, Rye, Barley and Oats in the Northern Hemisphere, 1920.

Crop.	No. of countries.	1919.	1920.	Five year average 1914-18.	Per cent of 1919.	Per cent of average.
		000 bush.	000 bush.	000 bush.	p.c.	p.c.
Wheat.....	10	1,777,840	1,778,738	1,808,791	100·1	98·3
Rye.....	7	145,122	147,365	112,954	101·5	130·5
Barley.....	9	359,581	388,332	423,543	108·0	91·7
Oats.....	9	1,678,100	2,019,486	1,860,358	120·3	108·6

The countries are for wheat: Bulgaria, Spain, Finland, Italy, Canada, United States, Guatemala, British India, Algeria and Tunis; for rye: Bulgaria, Spain, Finland, Italy, Switzerland, Canada and United States; for barley: Bulgaria, Spain, Finland, Italy, Switzerland, Canada, United States, Algeria and Tunis; for oats: Bulgaria, Spain, Finland, Italy, Switzerland, Canada, United States, Algeria and Tunis.

Wheat Acreage in Southern Hemisphere.—Table II shows the area sown to wheat in three countries of the southern hemisphere for the season 1920-21, as compared with 1919-20.

II.—Area under Wheat in Countries of the Southern Hemisphere, 1920-21, as compared with 1919-20 and the average 1914-15—1918-19.

Countries.	1919-20.	1920-21.	Average 1914-15 to 1918-19.	P.c. of 1919-20.	P.c. of average.
	000 acres.	000 acres.	000 acres.	p.c.	p.c.
Argentina.....	14,957	16,062	16,566	107·4	97·0
Union of South Africa.....	801	823	841	102·8	97·9
Australia.....	6,344	11,500	10,399	181·3	1106

It will be noticed that for Argentina and South Africa the area for 1920-21 exceeds that of last year, but is still below the five-year average. For Australia the area exceeds that of the previous year by 81 and that of the average by 10 p.c.

CONDITION OF CROPS IN NORTHERN HEMISPHERE.

Prussia.—A preliminary estimate, published by the Prussian Statistical Bureau, indicates the following average yields per acre for 1920, as compared with 1919 in brackets: Winter wheat 25·5 (26·5), spring wheat $25\frac{1}{4}$ (24), winter rye $19\frac{3}{4}$ ($23\frac{1}{2}$), spring rye $16\frac{3}{4}$ ($17\frac{1}{4}$), winter barley $31\frac{1}{2}$ (33), spring barley 30 (30), oats $40\frac{1}{2}$ ($41\frac{1}{4}$). The condition of potatoes on September 1 was 2·9, against 2·8 on August 1, 1920, and 2·9 on September 1, 1919. (Scale 2 = good, 3 = average.)

Austria.—The condition of crops on August 1 is reported as follows: Wheat and barley 2·4, rye 2·7, oats 2·1, corn 2·2, flax 2·3, sugar beets 2. (Scale 2 = good, 3 = average.) Early flaxseed was good, but the fibre had deteriorated. The later crop had grown well and the fibre was satisfactory.

Bulgaria.—Weather conditions have been favourable, damage resulting from rain and hail having been insignificant.

Denmark.—The promise of a yield above average is maintained according to reports of September 1. The condition of the potato crop is about average.

Ireland.—August was more favourable to grain crops than July. Straw is short as a rule, and there is therefore less lodging than usual. The potato crop on September 1 was about average.

Italy.—Favourable threshing weather is experienced. On September 1 the condition of corn and sugar-beet crops was average, whilst that of rice was good.

Czecho-Slovakia.—The condition of cereal crops on September 1 was reported as follows:

Crop.	Bohemia.	Moravia.	Silesia.
Wheat.....	2·8	2·6	2·4
Rye.....	3·5	3·3	3·7
Barley.....	2·6	2·7	2·5
Oats.....	3·0	2·7	2·3
Corn.....	—	2·5	—
Potatoes.....	—	—	2·3
Sugar beets.....	—	—	2·0

Scale: 2=good, 3=average, 4=below average.

British India.—The monsoon rainfall has continued on a sufficient scale in the greater part of India during August, but rain was much needed in the Bombay Presidency, in the United Provinces and in northwestern India, at the beginning of September.

Morocco.—The intense drought and sirocco winds up to the beginning of August have caused a serious deterioration of the cereal crops.

STATISTICS OF FARM LIVE STOCK.

Germany.—The estimated numbers of farm live stock in Germany on June 1, 1920, are as follows, the corresponding estimates for June 2, 1919, being given in brackets: Cattle 16,981,522 (16,381,605); sheep 7,021,342 (6,162,794), swine 11,656,813 (8,610,786), goats 4,967,537 (4,679,419). Owing to widespread foot-and-mouth disease in Hesse and Wurtemberg, the census of June, 1920, was not taken, and the data for these two provinces are for March, 1920.

Tunis.—The numbers of farm live stock on February 28, 1919, as compared with April, 30, 1918, in brackets, are reported as follows: horses 78,864 (35,831), mules 31,324 (16,236), asses 198,654 (84,639), cattle 634,823 (251,490), sheep 2,661,579 (1,124,998), goats 1,660,621 (548,912), pigs 17,681 (14,596), and camels 170,606 (105,037)

PRODUCTION OF SUGAR BEETS AND BEET-ROOT SUGAR.

At the present time there are three sugar factories in Canada which manufacture sugar from Canadian grown sugar beets. They are situated at Chatham, Wallaceburg and Kitchener, in the province of Ontario and are under the control of the Dominion Sugar Company, Ltd., of Chatham. From 1903 until 1914, when it went out of business, there was also in operation the Knight Sugar Company of Raymond in Alberta.

In the following table are given particulars respecting the area, yield and value of sugar beet as a farm crop and of the production of refined sugar made from Canadian grown sugar beets.

Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar, 1911-1919.

Year.	Acres grown.	Yield per acre.	Total yield.	Average price per ton.	Total value.	Production of refined beetroot sugar.
	Acres.	Tons.	Tons.	\$ cts.	\$	lb.
1911.....	20,677	8.50	175,000	6 59	1,154,000	21,329,689
1912.....	18,900	10.50	201,000	5 00	1,005,000	26,767,287
1913.....	17,000	8.75	148,000	6 12	906,000	26,149,216
1914.....	12,100	9.00	108,600	6 00	651,000	31,314,763
1915.....	18,000	7.75	141,000	5 50	775,500	39,515,802
1916.....	15,000	4.75	71,000	6 20	440,000	17,024,377
1917.....	14,000	8.40	117,600	6 75	793,800	23,376,850
1918.....	18,000	11.25	204,000	12 71	2,593,715	50,092,835
1919.....	18,800	9.50	180,000	14 61	2,630,027	37,839,271

As will be noticed from the table, there has been during the last two years a considerable increase in the acreage and production of sugar beet and in the production of refined beetroot sugar, the latter having increased from 23,376,850 pounds in 1917 to 50,092,835 pounds in 1918, receding to 37,839,271 pounds in 1919. The value of refined beetroot sugar produced was \$4,358,077 in 1918 and \$3,924,411 in 1919; consequently the wholesale price per pound of the sugar was 8.7 cents in 1918 and 10.4 cents in 1919.

The present high prices prevailing for sugar should prove a considerable inducement toward expansion of the sugar beet growing industry, including its manufacture into beetroot sugar. There are undoubtedly areas in Canada where the climatic conditions are favourable, whilst the cultivation of sugar beet has many advantages from a purely agricultural viewpoint. Not the least is the fact that the cultivation necessary for the sugar beet crop affords excellent preparation for other crops in the rotation; but the successful establishment of the industry depends upon a variety of other than climatic or cultural factors, all of which have to be carefully weighed before a new sugar beet enterprise can be started with any prospect of success. Foremost amongst the considerations involved is the fact

that the sugar beet campaign lasts for only a portion of the year, and a factory to be kept going during the whole of the year must engage in the refining of imported raw sugar. Contracts have to be entered into with a sufficient number of farmers easily accessible to the factory to ensure a definite supply of roots annually. The factory must be in a position to secure the necessary machinery with expert and skilled labour and to command adequate supplies of cheap fuel. Convenient access to markets in competition with other sources of supply is also essential. Where all the factors combine to render probable the successful institution of the industry in any new locality, there is no doubt that from the agricultural point of view the establishment of the industry is of great value.

A bulletin on the Beet Sugar Industry by the late Dr. Archibald Blue, which was issued in 1909 by the Census and Statistics Office, though now out of date as regards prices and values, contains much information of a practical character, and copies are still available for distribution upon application to the Dominion Bureau of Statistics. Printed as an appendix to this Report were extracts from the Hearings of the Parliamentary Customs Tariff Committee of 1905 on the subject of the beet sugar industry which, though tabled in MS. in the House of Commons at the time, have not otherwise been published.

INFLUENCE OF CLIMATE ON THE YIELD AND QUALITY OF SUGAR BEET IN CANADA.

By E. G. McDougall, M.A., Dominion Meteorological Service, Toronto.

With the view of determining the suitability of soil and climatic conditions in various parts of the Dominion for the growth of the sugar beet, Dr. Frank T. Shutt, Dominion Chemist and Assistant Director of Experimental Farms, inaugurated, in 1902, an investigation which included plot trials on the farms and stations of the system with seed of well-known factory varieties of beets and the analysis of the harvested product in the Farm's laboratories at Ottawa. The reports of the Division of Chemistry, issued annually, contain the details and data of this work, which is now in its eighteenth year. The analytical data as published comprise the percentage of sugar in the juice, the percentage of solids in the juice, and the coefficient of purity, i.e., the percentage of sugar in the dissolved solids. In addition, the average weight of one root was generally given, the samples consisting of twelve roots.

The yield per acre was estimated on the various farms; but the small size of the plots, which seldom exceeded $\frac{1}{100}$ acre, renders this factor a very doubtful one. Several varieties were grown, however, and by taking the average results of the three leading varieties, discarding one if it differed widely from the other two, it is hoped that a fair indication of the yield on a larger area has been obtained.

The object of the writer was to correlate these experimental results with the weather factors during the growing season, in so far as these were obtainable from the records of the Dominion Meteorological

Office. At the outset a difficulty appeared in the very variable length of the growing season. In the accompanying table of correlations, the extreme cases have been eliminated, but the season still varies in length from 136 to 163 days. For purposes of correlation, the growing season has been divided into three periods, the first two being fifty days in length, while the third is allowed to vary. The weather factors at each station for each period were tabulated, including the mean daily maximum and minimum temperatures, the rainfall, and the relative humidity. The last factor was not always recorded on the farm, and in many cases stations at some distance were utilized to supply a record.

In the table, the first column gives the number of instances, the second column, the first variable; the third column, its mean value, and the fourth column, its standard deviation (S.D.). The fifth column gives the second variable, generally a weather factor, and the sixth column, the period referred to (the figure 1 denotes the first 50 days, the figure 2 the second 50 days, etc., while 123 denotes the whole season).

Coefficients of Correlation between Beet Crops and Weather Factors.

(a) TOTAL CORRELATIONS.

Num- ber.	Variable 1.	Mean.	S.D.	Variable 2.	Pe- riods.	Mean.	S.D.	Coeff- icient of Cor- relation	Prob- able Error±
157	Per cent of sugar....	16.4	2.5	Coeff. of purity.....	-	85.0	6.3	+0.793	0.020
157	" ".....	16.4	2.5	Per cent of impurities....	-	2.8	1.0	-0.559	0.037
134	" ".....	16.4	2.4	Wt. of one root.....	-	21 oz.	7 oz.	-0.156	0.057
63	" ".....	16.6	2.5	" ".....	-	22 oz.	6.4 oz.	-0.321	0.075
63	" ".....	16.6	2.5	Mean maximum temp.....	123	69.4°	2.7°	+0.060	0.085
63	" ".....	16.6	2.5	Mean Minimum temp.....	123	45.8°	3.8°	+0.312	0.077
63	" ".....	16.6	2.5	Mean daily temp.....	123	57.6°	2.8°	+0.282	0.077
63	" ".....	16.6	2.5	Mean range of temp.....	123	23.6°	3.6°	-0.168	0.083
63	" ".....	16.6	2.5	Total rainfall.....	123	13.1"	4.1"	+0.023	0.085
63	Coeff. of purity.....	85.2	6.2	Mean Maximum temp.....	123	69.4°	2.7°	-0.037	0.085
63	" ".....	85.2	6.2	Mean minimum temp.....	1	46.1°	4.1°	+0.333	0.076
63	" ".....	85.2	6.2	" ".....	12	48.5°	4.0°	+0.487	0.065
63	" ".....	85.2	6.2	" ".....	123	45.8°	3.8°	+0.502	0.064
63	" ".....	85.2	6.2	Mean range of temp.....	1	23.6°	3.6°	-0.424	0.070
63	" ".....	85.2	6.2	" ".....	12	24.1°	3.8°	-0.398	0.071
63	" ".....	85.2	6.2	" ".....	123	23.6°	4.0°	-0.428	0.070
63	" ".....	85.2	6.2	Mean daily temp.....	123	57.6°	2.8°	+0.330	0.077
63	" ".....	85.2	6.2	Rainfall.....	1	4.9"	2.0"	-0.061	0.085
63	" ".....	85.2	6.2	" ".....	23	8.0"	3.5"	+0.419	0.070
63	" ".....	85.2	6.2	" ".....	123	13.1"	4.1"	+0.308	0.077
55	" ".....	85.2	6.4	Mean humidity.....	123	78.8%	6.2%	+0.232	0.086
55	Yield per acre (bu.).	458	173	" ".....	1	76.0%	6.7%	+0.520	0.066
55	" ".....	458	173	" ".....	279	0.0%	6.3%	+0.514	0.067
55	" ".....	458	173	" ".....	3	81.4%	7.1%	+0.456	0.072
55	" ".....	458	173	" ".....	123	78.8%	6.2%	+0.553	0.063
55	" ".....	458	173	Mean maximum temp.....	123	69.5°	2.7°	-0.424	0.075
55	" ".....	458	173	Mean minimum temp.....	123	45.9°	3.9°	+0.596	0.059
55	" ".....	458	173	Mean range of temp.....	123	23.6°	3.9°	-0.301	0.083
55	" ".....	458	173	Mean daily temp.....	123	57.7°	2.8°	+0.637	0.054
55	" ".....	458	173	Rainfall.....	23	8.0"	3.5"	+0.180	0.088
55	" ".....	458	173	" ".....	123	13.0"	4.2"	+0.190	0.088
55	" ".....	458	173	Mean temp. X humidity..	123	455	50	+0.650	0.052
55	" ".....	458	173	" ".....	123	137	8	+0.644	0.053
44	" ".....	408	131	Total rainfall.....	123	12.8"	4.6"	+0.153	0.100
44	" ".....	408	131	Mean humidity.....	123	77.9%	6.4%	+0.500	0.076
44	" ".....	408	131	Mean daily temp.....	123	57.5°	3.5°	+0.688	0.054
44	" ".....	408	131	Mean temp. X humidity..	123	450	49	+0.737	0.039

Coefficients of Correlation between Beet Crops and Weather Factors—con.

(b) PARTIAL CORRELATIONS BY PAIRS.

Num- ber.	Variable 1.	Variable 2.	Pe- riods.	Variable 3.	Pe- riods.	Coeff. r.
63	Coefficient of purity...	Mean maximum temp....	123	Mean minimum temp....	123	-0.181
63	" " ..	Mean minimum temp....	123	Mean maximum temp....	123	+0.524
63	" " ..	" " ..	123	Mean range of temp....	123	+0.315
63	" " ..	" " ..	123	Mean rainfall.....	23	+0.360
63	" " ..	Mean range of temp....	123	Mean minimum temp....	123	-0.127
63	" " ..	Total rainfall.....	123	" " ..	123	+0.201
55	Yield per acre.....	Mean relative humidity...	123	Mean daily temp....	123	+0.356
55	" " ..	" " ..	123	Mean range of temp....	123	+0.488
55	" " ..	Mean daily temp....	123	Mean relative humidity...	123	+0.431
55	" " ..	Mean range of temp....	123	Mean daily temp....	123	-0.100
55	" " ..	Mean range of temp....	123	Mean relative humidity...	123	+0.086
55	" " ..	Total rainfall.....	123	Mean daily temp....	123	+0.177
44	" " ..	Mean daily temp....	123	Mean relative humidity...	123	+0.646
44	" " ..	Relative humidity.....	123	Mean daily temp....	123	+0.415

(c) LINEAR REGRESSION EQUATIONS.

	Scatter.	S.D.
(1) Purity=57.3 + 0.57 minimum 123 + 0.57 rain 23-0.12 range 123.....	5.3	6.2
(2) Yield=8.9 humidity 123 + 30.1 mean 123-1976.....	124	173
3) Yield=5.1 humidity 123 + 29.4 mean 123-1677.....	94	131

The seventh and eighth columns give the mean value and the standard deviation of the second variable; the ninth column gives the coefficient of correlation to three decimal places, and the tenth, the probable error.

The percentage of sugar shows a high positive correlation with the coefficient of purity, and a fairly high negative one with the percentage of impurities. In neither case are the quantities independent of one another; so that it would be rash to draw conclusions from these correlations. The percentage of sugar shows an insignificant negative correlation with the weight of one root, but a considerably higher one when the samples with seasons of abnormal length are eliminated. In other words, when roots of the same age are considered there is an appreciable tendency for the smaller beets to be richer in sugar.

The correlations between the percentage of sugar and the weather factors are decidedly small; the largest (that with the mean minimum temperature for the season) is only about four times the probable error. The correlation with mean maximum temperature is almost nil; that with the mean range of temperature is negative and quite small.

The coefficient of purity is more significantly related with the weather factors than the percentage of sugar, probably because, unlike the latter, it is unaffected by variations in the water content. As in the case of the sugar percent, it is practically unrelated with

the mean maximum temperature, and has its highest correlation (a positive one) with the mean minimum temperature for the season. It is negatively correlated with the range of temperature, and positively with the rainfall of the second and third periods. Its correlation with the relative humidity is positive, but small.

We now come to the yield per acre, which, as stated above, is a doubtful factor. In some cases, where the analysis was made, the yield per acre was not given; so the number of instances is less than in the former case. The occurrence of extraordinarily large yields at the beginning of the series suggested a systematic error in the estimation; hence two sets of calculations were made, one using all data available, the other eliminating the eleven crops that were obtained before 1908. (Note the difference of 50 bushels in the average, and of 42 bushels in the standard deviation). The results are not very discrepant, but in the writer's opinion the shorter series is the more reliable.

SUGAR BEETS IN CANADA.

Fig. 1.
Yield per Acre

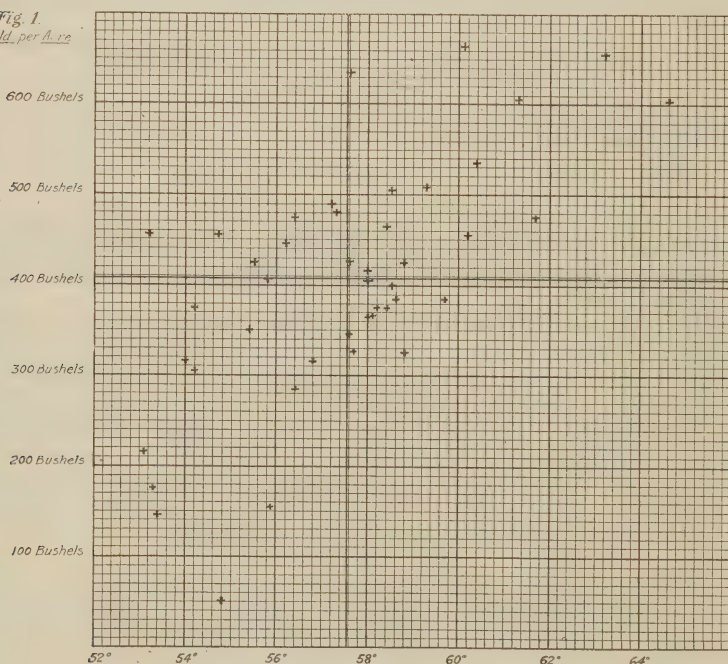


Fig. 1.—Mean Temperature of Growing Season.

The yield is positively related with both maximum and minimum temperatures, and most significantly with the mean temperature of the season. It has a high positive relation with the humidity, and an unexpectedly low one with the rainfall. In the shorter

series, the correlation with mean temperature is increased, while that with humidity is reduced. The product of mean temperature and humidity shows a high correlation with yield in each case, and it is significantly higher in the abbreviated series.

The magnitude of these correlations certainly suggests the existence of a real relationship between yield and seasonal conditions of temperature and humidity, notwithstanding the inaccuracy attaching to the figures of yield. To give a more tangible idea of the relationship, a dot chart (Fig. 1) showing the yields and mean temperatures for the growing season is presented herewith.

Some partial correlations of the weather factors with the purity and yield are also given in order to show as far as possible the isolated effect of each factor by eliminating the influence of some other. Several interesting points are brought out in this table. It would seem that the range of temperature has little independent effect; its apparent negative correlation with the purity is largely due to its negative correlation with the minimum temperature; while its negative relation with the yield seems to be entirely due to its negative relation with the humidity. On the other hand, both mean temperature and humidity appear to exert an important independent effect on the yield.

Finally, some linear regression equations have been developed, with the object of calculating the purity and yield from the weather factors for the season. The process is described by T. A. Blair in an article in the U.S. Monthly Weather Review for December, 1919. The equation has the general form—

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots$$

where Y is the yield, a b_1 b_2 , etc., are constants, and x_1 x_2 , etc., are the important weather factors expressed numerically. The equation for the purity is based on the minimum temperature and range of temperature for the season and the rain for the second and third periods. The two equations for the yield, having 55 and 44 examples respectively, are based on the mean temperature and humidity for the season.

The purity and yield were calculated from each example, and deducted from the observed purity and yield. The square root of the mean square of the difference, called the scatter, is a measure of the accuracy of the formula. In each of these cases the scatter is less than the standard deviation of the purity or yield, but the improvement over chance values is not very noticeable. In the case of the purity, it is probable that its relation with the factors in question is not linear, as the formula assumes; while in the case of the yield, the inaccuracy due to the small size of the plots makes it unreasonable to expect a very close approximation.

American observers, working with a higher range of temperature values, have noted the positive relation between yield and mean temperature for the season, while they obtained a negative relation between the mean temperature on the one hand and the sugar and

temperature; it gives the highest yield, but the quality of its crops, measured by sugar and purity, falls behind that of several other regions, such as southern British Columbia and the Maritime Provinces, where the summers are cooler.

Parallel experiments on dry and irrigated farms have been conducted at Lethbridge, Alberta, and the chart of the results indicates that the irrigated plot enjoyed a distinct advantage. Poor results as to quality were obtained on the South-eastern Prairie, and as to yield in the province of Quebec, though in this case there is reason to believe that the experimental stations do not represent the most productive part of the province. The northern stations, Rosthern, Scott, Lacombe, and Fort Vermilion, give poor results, especially with regard to quality.

CONCLUSIONS.

(1) The yield per acre, though not determined with sufficient accuracy, is probably the most variable factor, and the one upon which success or failure most often depends.

(2) The yield is closely related with the mean temperature, and (in a less degree) with the mean relative humidity of the growing season. Conditions are favourable when the mean temperature exceeds 60° F. and the relative humidity exceeds 80 p.c.; they are unfavourable when the temperature falls below 55° F. and the relative humidity below 70 p.c.

(3) Within ordinary limits, the yield of sugar beets is little affected by variations in rainfall, provided that the crop is thoroughly cultivated. In semi-arid regions, irrigation increases the yield without impairment of the quality.

(4) The quality of the beets depends chiefly on the night temperatures. The sugar content and purity decline when the mean minimum for the season falls below 45° F.

(5) The best yields are obtained in the warmer parts of Ontario: the highest quality, in British Columbia, southern Alberta, and the Maritime Provinces.

STATISTICS OF FRUIT PRODUCTION IN QUEBEC, 1919.

As was stated in the Report on Fruit Statistics, published in the August issue of the Monthly Bulletin, it was found impracticable to obtain for all Canada satisfactory statistics of the production in 1919 of all descriptions of fruit, and the inquiry for this year was therefore limited to the commercial production of apples and the sales of nursery fruit stock. In the course, however, of the preliminary discussions, the Horticultural Division of the Quebec Department of Agriculture undertook to collect from its fruit instructors, and through other official sources of information, estimates of the production in 1919 of the principal descriptions of fruit in those counties of the province of Quebec where fruit growing is practised on a commercial scale. The inquiry has now been completed, and the results have

been communicated to the Dominion Bureau of Statistics. They are accordingly published as below, subject to the reservation that the estimates are entirely those of the Horticultural Division of the Quebec Department of Agriculture.

Fruit Production of the province of Quebec, 1919, as estimated by the Horticultural Division of the Quebec Department of Agriculture.

APPLES.

Counties.	Area.	Trees in bearing.	Trees not in bearing.	Quantity harvested
	acres	No.	No.	barrels
Beauce.....	44	749	797	258
Charlevoix.....	93	971	4,643	293
Chateauguay.....	938	28,331	24,402	10,752
Huntingdon.....	521	18,209	4,841	5,733
Laval.....	220	5,268	3,513	2,546
Lévis.....	187	8,736	7,335	4,482
L'Islet.....	112	2,492	1,557	821
Montmorency.....	—	—	—	30,893
Montmagny.....	80	2,953	1,414	384
Montmorency I.O.....	440	8,595	29,903	5,361
Québec.....	27	12,969	6,843	3,113
Rouville.....	2,704	89,375	82,613	45,770
Totals.....	5,366	178,648	167,861	110,406

STRAWBERRIES.

Counties.	Area.	Plants in bearing.	Quantity gathered.	Quantity sold.	Price.
	acres.	No.	lb.	lb.	cents per lb.
L'Islet.....	1.20	5,250	1,466	90	—
Montmagny.....	0.75	1,950	195	—	—
Montmorency I.O.....	246.37	16,500	567,300	562,800	0.16½
Quebec.....	2.25	8,250	22,500	15,000	0.19
Rouville.....	2.25	—	144	—	0.18
Totals.....	252.82	31,950	591,605	577,890	—

RASPBERRIES.

Levis.....	2.25	4,950	5,220	5,108	0.16½
L'Islet.....	1.00	1,950	38	—	—
Montmagny.....	1.00	1,800	188	—	—
Montmorency I.O.....	26.63	—	49,650	49,650	0.19
Quebec.....	1.12	3,645	1,350	1,200	0.15
Rouville.....	1.50	—	—	—	—
Totals.....	33.50	12,345	56,446	55,958	—

Fruit Production of the province of Quebec, 1919, as estimated by the Horticultural Division of the Quebec Department of Agriculture—con.

GOOSEBERRIES.

Counties.	Area.	Plants in bearing.	Quantity gathered.	Quantity sold.	Price.
	acres	No.	lb.	lb.	cents per lb.
Levis.....	8.63	23,190	22,575	22,575	0.11½
L'Islet.....	0.44	387	1,500	225	0.06
Montmagny.....	0.38	75	360	300	—
Quebec.....	—	563	4,125	3,750	0.15
Totals.....	9.45	24,215	28,560	26,850	—

CURRANTS.

Levis.....	—	0.45	113	—	—
L'Islet.....	2.88	6.20	998	—	—
Montmagny.....	0.60	0.93	60	—	—
Quebec.....	—	0.30	75	—	—
Totals.....	3.48	7.88	1,246	—	—

The table shows that the total production of the different fruits was as follows: Apples 110,406 barrels; strawberries 591,605 lb.; raspberries 56,446 lb.; gooseberries 28,560 lb. and currants 1,246 lb. The value of these fruits may be estimated as follows: Apples at \$5 per barrel, \$552,030; strawberries at 17 cents per lb., \$100,573; raspberries at 16 cents per lb., \$9,031; gooseberries at 10 cents per lb., \$2,856; and currants at 15 cents per lb., \$187. The total value of all the fruits named is therefore \$664,677.

Fruit Statistics, 1919.—The Report on Fruit Statistics which, appeared in the August issue of the Monthly Bulletin, has been reprinted in pamphlet form for distribution to fruit growers and others interested in fruit production. Copies will be sent on application to the Dominion Bureau of Statistics, Ottawa, as long as the limited supply remains available.

THE WEATHER DURING SEPTEMBER.

The Dominion Meteorological Office reports that the temperature was above the average from Alberta to central Quebec, diminishing to average or slightly below towards the Pacific and Atlantic coasts. Over the greater portion of Ontario the positive departure was from 3 to 5 degrees, and in southern Alberta and locally in Manitoba as much as 4 degrees. The precipitation in British

Columbia was much above the average nearly everywhere. In the Lower Mainland it was unusually heavy, Vancouver recording an excess of 6.9 inches. In Alberta it was slightly below in the northern portion and much below in the southern portion, where in some places no precipitation occurred. In Saskatchewan, except in the extreme southwestern portion, it was above, Qu'Appelle exceeding the average by one inch. In Manitoba it was exceeded by from about three-quarters of an inch to an inch and a half. In Ontario, from Kingston to the eastern boundary and north to Ottawa and its vicinity, there was from 1.40 to 2 inches more than the average, while over most of the remainder of the province there was a deficiency of from about one to two inches. Quebec was a little above the average in some parts of the province and below in others. Father Point recorded 1.45 inch less than the usual amount. In the Maritime Provinces the rainfall was very much above the average in some localities, and considerably below in others. Chatham recorded a positive departure of 3.67 inches, while, on the other hand, Halifax had a negative departure of 2.31 inches.

PRICES OF AGRICULTURAL PRODUCE.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

SOURCE: Board of Grain Commissioners for Canada.

Grain and Grade.	Sept. 4.		Sept. 11.		Sept. 18.		Sept. 25.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
No. 1 Nor.....	2 76	—2 82½	2 77½	—2 85½	2 78½	—2 83½	2 54½	—2 78½
No. 2 Nor.....	2 73	—2 79½	2 74½	—2 82½	2 75½	—2 80½	2 50½	—2 75½
No. 3 Nor.....	2 69	—2 75½	2 70½	—2 78½	2 71½	—2 76½	2 45½	—2 71½
No. 4.....	2 55	—2 61½	2 55½	—2 65½	2 56½	—2 63½	2 32½	—2 55½
No. 5.....	2 44	—2 50½	2 44½	—2 54½	2 46½	—2 53½	2 22½	—2 45½
Oats—								
No. 2 C.W.....	0 84½	—0 93½	0 83½	—0 88½	0 79½	—0 87½	0 73½	—0 79
No. 3 C.W.....	0 81½	—0 90½	0 80½	—0 87½	0 76½	—0 86½	0 70½	—0 76½
No. 1 feed ex.....	0 81½	—0 90½	0 80½	—0 87½	0 76	—0 86½	0 74	—0 75½
No. 1 feed.....	0 79½	—0 88½	0 79½	—0 86½	0 74½	—0 85½	0 73	—0 75½
No. 2 feed.....	0 77½	—0 85½	0 79½	—0 86½	0 71½	—0 85½	0 66½	—0 71
Barley—								
No. 3 C.W.....	1 25½	—1 29	1 25½	—1 31½	1 18	—1 29½	1 11½	—1 16½
No. 4 C.W.....	1 20½	—1 24	1 20½	—1 25½	1 09	—1 22½	1 05½	—1 07½
Rejected.....	1 09½	—1 13½	1 09½	—1 16½	1 02	—1 14	0 96½	—0 99
Feed.....	1 09½	—1 13½	1 09½	—1 16½	1 00	—1 14	0 94½	—0 97
Flax—								
No. 1 N.W.C.....	3 41	—3 47½	3 45½	—3 66	3 42	—3 55½	3 30	—3 40½
No. 2 C.W.....	3 35	—3 41	3 38½	—3 59	3 36	—3 48½	3 24	—3 32½
No. 3 C.W.....	3 13	—3 17	3 09½	—3 30	3 05	—3 19½	2 85	—3 03½
Rye—								
No. 2 C.W.....	1 98	—2 04	1 97½	—2 01½	1 96½	—2 03½	1 73	—1 92½

II.—Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1920.

(Source: Monthly Crop Report of the U.S. Department of Agriculture.)

Grain and Market.	June.		July.		August.		September.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red, Winter, No. 2—								
St. Louis.....	2 75	—2 99	2 24	—2 91	2 22	—2 62	2 35	—2 68
Chicago.....	2 75	—3 00	2 29	—2 85	2 22	—2 62½	—	—
New York (f.o.b.) afloat.....	3 05	—3 20	2 58	—3 25	2 50	—2 89	2 53	—2 94
Corn, No. 2, mixed—								
St. Louis.....	1 77	—2 00	1 49	—1 78	1 44	—1 73	1 03	—1 51
Corn No. 2—								
Chicago.....	1 76	—2 01½	1 40	—1 83½	1 40	—1 49	—	—
Oats, No. 2—								
St. Louis.....	1 07½	—1 22	0 70	—1 12½	0 69	—0 70	0 55	—0 72
Chicago.....	1 07	—1 29	0 72	—1 06	0 68	—0 88½	—	—
Rye, No. 2—								
Chicago.....	2 13	—2 41	1 71	—2 35½	1 70	—2 10	—	—

III.—Prices of Imported Grain and Flour at British Markets, 1920.

SOURCE: For Mark Lane, London, "The Mark Lane Express", for Liverpool "Broomhall's Corn Trade News".

Mark Lane.	Sept. 6-27.		Liverpool.	Sept. 7-28.
	\$ c.	\$ c.		\$ c.
Wheat—				
Canadian No. 1.....	2 85½	—	Nor. Man. No. 1.....	3 01
“ No. 2.....	2 82½	—	“ No. 2.....	2 98
“ No. 3.....	2 76½	—	Man. No. 3.....	2 95
“ No. 4.....	2 73½	—	Red Winter No. 2.....	2 95
American spring.....	2 82½	—	Hard winter No. 2.....	2 98
American hard winter.....	2 85½	—	Australian.....	3 04
“ red winter No. 2.....	2 79½	—		
Australian.....	3 03	—		
Argentine.....	2 91½	—		
Oats—				
Canadian.....	1 62½	—1 65½		
American.....	1 57½	—1 60½		
Chilian.....	1 70½	—1 75½		
Flour ¹ —				
Canadian spring.....	16 00	—		
American spring.....	16 00	—		
American winter.....	16 00	—		
Australian.....	16 00	—		

¹ For September 20 and 27—\$21.47.

IV.—Average Prices of British-grown Grain, 1920.

SOURCE: "London Gazette", as published pursuant to s. 8 of the Corn Return's Act, 1882.

Week ended	Wheat.		Barley.		Oats.	
	per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$
September 4.....	90 8	2.758	78 7	2.295	54 4	1.440
“ 11.....	90 6	2.753	80 6	2.351	54 5	1.442
“ 18.....	90 5	2.750	80 7	2.353	54 11	1.455
“ 25.....	90 5	2.750	80 2	2.341	55 5	1.468
Average.....	90 6	2.753	80 0	2.335	54 9	1.451

V—Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1920.

Source: For Montreal, Trade Bulletin; for Toronto, Dealers' quotations; for Winnipeg, and U.S. Cities, "The Northwestern Miller," Minneapolis.

Month.	Montreal.				Toronto.			
	Flour		Shorts.		Standard Flour		Bran.	
	Manitoba Standard grade.	Ontario del'd at Montreal.	Per bbl.	Per ton.	(dute bags).	(Cotton bags.)	Per ton.	Shorts.
1920.	Per bbl.	Per bbl.	Per ton.	Per ton.	Per bbl.	Per bbl.	Per ton.	Per ton.
January.....	\$ 13 34	\$ 9 75	\$ 44 70	\$ 52 25	\$ 13 25	\$ 13 40	\$ 45 25	\$ 52 25
February.....	13 40	10 90	45 25	52 25	13 25	13 45	45 25	52 25
March.....	13 40	10 76	45 25	52 25	13 25	13 45	45 25	52 25
April.....	13 47	10 76	48 87	55 87	13 40	13 60	15 25	58 25
May.....	14 55	11 38	53 50	60 50	14 85	15 05	54 25	61 25
June.....	14 95	13 25	54 25	61 25	14 85	15 05	54 25	61 25
July.....	14 92	Nominal	54 25	61 25	14 85	15 05	54 25	61 25
August.....	14 95	Nominal	54 25	61 25	14 85	14 55	54 25	61 25
September.....	14 21	Nominal	54 25	61 25	14 25	14 55	54 25	59 75

Month.	Winnipeg.				Minneapolis.				Duluth.	
	Flour.		Shorts.		Flour.		Shorts.		Flour.	
	Per bl.	Per ton.	Per ton.	Per bl.	Per bl.	Per ton.	Per ton.	Per ton.	Per bl.	Per bl.
1920.	Per bl.	Per ton.	Per ton.	Per bl.	Per bl.	Per ton.	Per ton.	Per ton.	Per bl.	Per bl.
January.....	\$ 12 65	\$ 39 00	\$ 46 00	\$ 14 53	\$ 15 36	\$ 41 58½	\$ 42 70	\$ 44 37	\$ 45 10	\$ 45 10
February.....	12 65	39 00	46 00	13 41	14 20	42 50	43 87½	47 83	48 50	48 50
March.....	12 65	39 00	46 00	13 37½	14 25	47 00	48 25	51 50	52 87½	53 55
April.....	12 76½	43 50	50 50	14 55	15 01	49 66	50 50	54 00	54 87½	55 14
May.....	13 64	46 80	53 80	15 28	15 69	53 00	53 40	57 25	57 60	58 14
June.....	14 30	48 00	55 00	14 02	14 60	50 75	52 62½	56 00	56 75	57 14
July.....	14 30	48 00	55 00	13 68	14 00½	47 00	48 12½	53 25	54 50	55 14
August.....	14 30	48 00	55 00	12 32	12 88	41 50	42 80	50 00	51 80	52 14
September.....	13 20	48 00	53 00	12 70	13 35	37 33½	38 25	45 00	47 25	48 14

NOTE.—The ton=2,000 lb. and the barrel = 196 lb.

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	April.	May.	June.	July.	Aug.	Sept.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Montreal—						
Steers, heavy finished.....	15-50	—	15-75	—	—	—
Steers, 1,000-1,200 lb., good.....	14-18	15-25	15-9125	14-50	11-82	11-72
Steers, 1,000-1,200 lb., common.....	—	—	—	12-00	11-27	—
Steers, 700-1,000 lb., good.....	13-62	14-20	14-6875	13-65	11-00	11-00
Steers, 700-1,000 lb., common.....	11-57	12-00	12-8125	10-95	9-00	8-57
Heifers, good.....	13-52	13-50	14-0625	12-70	70-25	10-41
Heifers, fair.....	10-72	11-25	11-75	10-40	8-67	8-48
Heifers, common.....	8-90	9-65	9-125	7-70	7-22	7-43
Cows, good.....	11-58	11-65	11-8125	10-65	9-28	8-94
Cows, common.....	8-62	9-00	9-25	7-75	6-73	6-83
Bulls, good.....	11-86	11-10	11-625	10-583	9-26	8-25
Bulls, common.....	9-02	9-25	9-50	6-70	5-88	5-65
Canners and Cutters.....	6-24	6-35	6-3125	4-75	4-24	4-00
Oxen.....	—	11-25	12-50	10-00	—	11-50
Calves, veal.....	14-48	12-10	12-5625	10-20	11-98	13-76
Calves, grass.....	—	—	8-25	7-25	6-46	6-76
Stockers, 450-800 lb., good.....	—	—	—	—	—	—
Stockers, 450-800 lb., fair.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., good.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	20-93	21-00	20-4375	21-04	20-77	—
Hogs (fed and watered), heavies.....	20-75	20-50	19-516	18-875	18-41	—
Hogs (fed and watered), lights.....	20-57	20-80	—	18-90	—	—
Hogs (fed and watered), sows.....	16-71	16-90	16-337	16-87	16-30	16-09
Hogs (fed and watered), stags.....	—	—	—	13-90	—	—
Lambs, good.....	16-29	—	18-1666	14-90	12-71	12-60
Lambs, common.....	15-22	—	—	13-125	10-66	11-21
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	12-59	12-25	10-925	8-62	7-16	6-90
Sheep, common.....	11-56	11-50	9-50	7-45	6-68	6-30
Toronto—						
Steers, heavy, finished.....	14-25	15-15	15-195	15-55	14-04	—
Steers, 1,000-1,200 lb., good.....	13-57	14-47	14-85	14-65	12-91	12-41
Steers, 1,000-1,200 lb., common.....	11-53	12-85	12-64	12-50	10-75	8-63
Steers, 700-1,000 lb., good.....	13-04	13-85	14-84	14-20	11-43	10-82
Steers, 700-1,000 lb., common.....	10-70	11-71	11-8225	11-85	10-37	8-79
Heifers, good.....	12-95	13-83	14-60	14-05	12-83	17-03
Heifers, fair.....	11-02	12-07	13-142	12-15	10-61	8-93
Heifers, common.....	9-29	10-23	10-775	9-75	8-64	7-44
Cows, good.....	10-75	11-56	12-8125	11-90	10-29	10-33
Cows, common.....	8-68	9-66	11-0825	9-75	8-06	7-33
Bulls, good.....	10-55	11-69	12-172	11-20	8-90	9-90
Bulls, common.....	8-91	9-64	10-112	8-70	6-91	7-16
Canners and Cutters.....	6-04	6-09	5-855	4-90	4-33	4-63
Oxen.....	—	—	—	—	—	—
Calves, veal.....	16-45	15-43	15-58	16-85	17-50	17-98
Calves, grass.....	10-00	—	—	—	—	—
Stockers, 450-800 lb., good.....	10-35	11-32	11-557	9-85	9-00	9-00
Stockers, 450-800 lbs. fair.....	9-21	1-67	10-15	8-60	8-00	8-00
Feeders, 800-1,000 lb., good.....	11-62	12-55	12-912	11-65	11-63	11-07
Feeders, 800-1,000 lb., fair.....	10-93	11-81	11-082	10-125	9-64	9-60
Hogs (fed and watered), select.....	20-15	20-23	19-59	20-60	20-39	20-60
Hogs (fed and watered), heavies.....	18-71	19-14	18-617	19-6875	19-57	19-78
Hogs (fed and watered), lights.....	18-03	18-14	17-7533	18-60	18-18	18-85
Hogs (fed and watered), sows.....	15-98	16-25	15-425	16-80	16-33	10-86
Hogs (fed and watered), stags.....	13-50	14-22	14-25	—	—	—
Lambs, good.....	18-65	16-77	19-1675	17-25	14-87	13-70
Lambs, common.....	15-72	15-01	17-385	15-10	10-77	9-46
Sheep, heavy.....	—	—	—	—	9-50	10-00*
Sheep, light.....	14-60	14-09	12-18	10-45	8-46	7-79
Sheep, common.....	6-86	7-68	7-535	7-45	6-32	4-83
Winnipeg—						
Steers, heavy, finished.....	13-37	15-01	15-227	12-30	11-19	10-83
Steers, 1,000-1,200 lb., good.....	12-45	14-10	14-495	11-746	10-57	10-49
Steers, 1,000-1,200 lb., common.....	9-00	9-50	10-00	8-96	7-81	7-60
Steers, 700-1,000 lb., good.....	11-46	13-35	13-3975	10-70	9-27	9-34
Steers, 700-1,000 lb., common.....	9-13	—	9-00	7-708	6-68	6-66
Heifers, good.....	11-36	13-40	13-3825	10-88	9-77	9-51

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	April.	May.	June.	July.	Aug.	Sept.
Winnipeg—con.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Heifers, fair.....	9.32	10.26	10.29	8.488	7.60	7.34
Heifers, common.....	7.25	8.00	7.56	6.148	5.50	5.61
Cows good.....	10.24	11.43	11.445	9.484	8.60	8.41
Cows, common.....	7.95	8.68	8.6875	7.026	6.20	6.22
Bulls, good.....	8.21	9.42	9.282	6.696	6.22	6.03
Bulls, common.....	6.37	6.90	6.778	5.443	5.11	5.18
Canners and Cutters.....	4.54	4.41	4.3725	3.886	3.60	3.91
Oxen.....	6.00	—	8.25	7.128	6.44	6.75
Calves, veal.....	12.59	13.21	11.5475	10.572	9.07	8.87
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8.63	8.63	8.91	7.418	6.31	6.33
Stockers, 450-800 lb., fair.....	7.42	7.91	7.145	6.012	5.12	5.19
Feeders, 800-1,100 lb., good.....	10.63	11.94	10.365	9.546	8.55	8.65
Feeders, 800-1,100 lb., fair.....	9.09	9.80	8.852	7.534	6.57	6.74
Hogs (fed and watered), selects.....	20.03	21.61	19.395	18.50	19.73	21.08
Hogs (fed and watered), heavies.....	17.91	19.65	17.252	16.492	17.23	18.38
Hogs (fed and watered), lights.....	17.72	19.56	17.1125	16.674	17.94	20.35
Hogs (fed and watered), sows.....	16.00	17.92	15.367	14.504	15.25	15.88
Hogs (fed and watered), stags.....	12.46	15.32	13.245	17.492	12.16	12.43
Lambs, good.....	15.00	15.65	15.995	17.974	12.53	11.61
Lambs, common.....	—	—	—	8.25	7.50	8.12
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	12.00	12.20	12.6075	9.658	7.77	7.56
Sheep, common.....	—	8.00	7.88	6.476	4.87	5.27
Calgary—						
Steers, heavy, finished.....	12.35	14.63	14.083	11.00	9.85	10.78
Steers, 1,000-1,200 lb., good.....	12.02	13.72	13.00	10.30	9.64	9.55
Steers, 1,000-1,200 lb., common.....	10.00	10.76	12.85	—	7.22	7.46
Steers, 700-1,000 lb., good.....	10.00	13.30	12.833	—	8.68	8.02
Steers, 700-1,000 lb., common.....	9.25	10.35	—	—	7.19	7.09
Heifers, good.....	11.00	13.50	13.25	8.25	7.86	7.78
Heifers, fair.....	10.10	—	—	—	7.42	6.78
Heifers, common.....	—	—	—	—	6.25	6.69
Cows, good.....	10.48	13.06	12.0625	8.96	7.58	7.94
Cows, common.....	7.92	9.57	8.35	7.138	6.31	3.36
Bulls, good.....	8.12	9.50	—	—	5.43	5.93
Bulls, common.....	7.14	—	5.50	5.00	—	5.06
Canners and Cutters.....	4.00	—	—	—	3.88	4.00
Oxen.....	—	—	—	—	—	6.75
Calves, veal.....	8.43	11.95	13.50	11.716	9.62	10.19
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8.50	9.09	9.187	8.33	7.68	7.43
Stockers, 450-800 lb., fair.....	7.50	8.60	8.037	7.61	6.60	6.40
Feeders, 800-1,100 lb., good.....	10.00	10.48	10.525	9.85	9.06	8.61
Feeders, 800-1,100 lb., fair.....	9.00	—	9.50	9.05	8.10	7.94
Hogs (fed and watered), select.....	20.49	21.52	19.525	17.90	19.34	22.30
Hogs (fed and watered), heavies.....	19.50	—	19.25	16.85	18.09	20.75
Hogs (fed and watered), lights.....	19.41	20.39	19.1725	17.30	17.78	18.81
Hogs (fed and watered), sows.....	17.47	18.40	16.275	14.90	18.27	10.89
Hogs (fed and watered), stags.....	—	—	—	12.25	13.15	—
Lambs, good.....	—	9.00	—	13.375	11.02	10.46
Lambs, common.....	—	—	—	11.00	8.77	9.00
Sheep heavy.....	—	—	—	8.50	—	—
Sheep, light.....	17.30	14.60	13.50	9.083	9.72	7.39
Sheep, common.....	—	—	—	—	7.00	6.50
Edmonton—						
Steers, heavy finished.....	13.45	14.24	—	—	9.25	9.00
Steers, 1,000-1,200 lb., good.....	11.97	14.08	12.8125	10.50	8.80	8.46
Steers, 1,000-1,200 lb., common.....	10.31	11.43	11.125	9.4375	7.16	6.65
Steers, 700-1,000 lb., good.....	10.71	12.00	11.75	9.50	7.68	7.54
Steers, 700-1,000 lb., common.....	9.53	10.68	10.1666	8.875	6.18	5.88
Heifers, good.....	10.68	12.10	12.25	9.417	7.30	7.40
Heifers, fair.....	10.34	11.03	10.4	8.8125	6.42	6.41
Heifers, common.....	9.20	10.00	9.375	7.90	5.22	4.81
Cows, good.....	10.42	12.48	11.50	8.85	7.23	6.94
Cows, common.....	8.68	9.76	9.1666	7.00	5.48	5.06
Bulls, good.....	7.75	9.00	7.833	6.00	5.30	5.00
Bulls, common.....	6.42	7.25	7.125	4.75	4.28	4.25
Canners and Cutters.....	5.00	5.50	—	—	—	—

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	April.	May.	June.	July.	Aug.	Sept.
Edmonton—con.						
Oxen.....	8.44	—	—	—	—	—
Calves, veal.....	11.84	14.47	14.00	10.60	9.23	8.99
Calves grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8.14	9.28	8.375	7.50	6.56	6.58
Stockers, 450-800 lb., fair.....	7.57	8.45	7.437	6.40	5.31	5.50
Feeders, 800-1,000 lb., good.....	—	10.93	10.375	9.15	—	—
Feeders, 800-1,000 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	19.94	21.20	19.3125	17.85	19.21	21.89
Hogs (fed and watered), heavies.....	18.99	20.25	18.312	16.813	17.82	19.16
Hogs (fed and watered), lights.....	16.83	18.15	17.0625	15.813	17.25	17.89
Hogs (fed and watered), sows.....	16.85	18.20	17.062	15.85	16.93	18.09
Hogs (fed and watered), stags.....	15.29	17.27	15.375	14.00	—	—
Lambs, good.....	17.00	—	—	13.00	9.07	10.28
Lambs, common.....	—	—	10.00	10.75	7.40	8.34
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	—	—	13.00	10.00	7.63	8.20
Sheep, common.....	—	—	—	8.25	5.48	5.30

VII. Average Prices of Milk in Principal Canadian Cities, 1919-20.

SOURCE: Dealers' Quotations.

Description.		Halifax, N.S.	Montreal, P.Q.	Toronto, Ont.	Winnipeg, Man.	Vancouver B.C.
Price Paid to Producers.		Cents per gallon.	Cents per gallon.	Per 8 gall. can.	Per cwt. ¹	Per lb. butter fat.
Winter.....	1919	40	35	\$ c. \$ c.	\$ c.	\$ c.
Spring and Summer.....	1919	40	30	2 80	2 95	1 10
Fall and Winter.....	1919-10	40	40	2 25-2 55	2 05	1 00
				3 10	3 40	1 10
Spring and Summer.....	1920	40	31	2 35-2 70	Per 10 gals. ²	1 10
³ Fall and Winter.....	1920-21	—	—	3 25	3-502	—
Wholesale Price to Hotels, Stores, etc.—		Cents per quart in cans.	Cents per quart in cans.	Cents per quart.	Cents per gallon.	Cents per gallon.
Winter.....	1919	13½	14	—	44	45
Spring and Summer.....	1919	13½	14	—	40	45
Fall and Winter.....	1919-20	13½	14	—	43	49
Spring and Summer.....	1920	13½	14	—	43-44	48
³ Fall and Winter.....	1920-21	—	—	—	53-55	—
Retail Price per single Quart Cash—		Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.
Winter.....	1919	15	14	15	13	15
Spring and Summer.....	1919	15	13	14	13	15
Fall and Winter.....	1919-20	15	16	16	15	15
Spring and Summer.....	1920	15	14-16	15	15	15
³ Fall and Winter.....	1920-21	—	—	17	—	—

¹Testing 3-6 p.c.²103 lb.³Preliminary.

VIII. Average Prices of Live Stock at Chicago, U.S.A., 1920.—Source: Market Reporter, U.S. Department of Agriculture.

Date	Hogs.			Cattle.				Sheep.		
	Bulk of Sales.		Light.	Beef Steers (choice and prime.)		Heifers.	Veal Calves.	Calves.	Lambs.	Wethers.
	\$ c.	\$ c.		Medium Heavy.	Light Weight.					
1920.										
Jan. 13.....	14 55-14 80	14 65-14 90	14 55-14 80	18 75-20 00	18 50-20 00	6 50-14 75	16 25-17 50	9 75-10 75	16 50-19 00	9 25-18 75
" 16.....	14 40-14 70	14 40-14 65	14 50-14 75	18 25-19 75	17 75-19 25	6 50-14 75	16 50-18 00	9 75-10 75	17 25-19 75	13 25-18 00
" 20.....	15 15-15 40	15 15-15 45	15 20-15 50	17 00-19 00	17 00-18 50	6 75-14 25	17 00-18 50	9 75-10 75	17 50-19 00	12 25-18 50
" 27.....	15 50-15 75	15 50-15 85	15 50-15 85	15 50-17 50	14 50-16 75	6 85-13 75	17 50-19 25	9 75-10 75	19 25-21 35	14 00-18 75
Feb. 10.....	15 00-15 30	15 00-15 30	15 00-15 40	15 00-17 15	14 10-16 65	6 65-13 25	17 50-19 00	9 50-11 00	17 25-20 00	13 00-18 50
" 17.....	14 40-15 10	14 50-15 20	14 50-15 20	15 00-17 00	13 75-16 50	6 50-12 50	16 25-17 50	9 50-11 00	18 00-21 25	12 50-19 00
" 24.....	13 75-14 25	14 00-14 50	14 40-14 85	14 75-16 85	13 40-16 50	6 40-13 00	15 75-17 25	9 50-11 00	18 00-21 25	13 00-18 75
Mar. 2.....	14 40-15 25	13 85-14 35	15 15-14 50	13 75-16 00	12 85-15 60	6 50-12 50	15 00-16 50	9 50-11 00	17 50-20 00	12 50-18 50
" 9.....	14 50-15 40	14 70-15 25	15 00-15 40	14 25-16 00	13 40-15 60	6 75-13 25	15 00-16 50	9 50-11 00	17 50-20 00	12 50-18 50
" 16.....	14 10-15 00	14 50-15 50	15 30-15 85	13 50-15 25	14 00-15 75	7 35-13 75	15 25-17 25	9 50-11 00	17 00-20 00	13 00-17 75
" 23.....	14 60-16 15	15 15-16 50	15 75-16 35	13 50-15 25	13 50-15 25	7 40-13 00	16 00-17 50	9 50-11 00	17 25-20 00	13 00-17 75
Apr. 6.....	15 25-16 25	15 65-16 50	16 00-16 50	14 00-15 50	14 00-15 50	8 00-14 00	16 00-17 50	9 50-11 25	18 00-20 75	15 50-18 50
" 13.....	14 75-15 80	14 90-15 60	15 15-15 60	14 25-15 60	14 25-15 25	7 85-14 25	12 50-14 00	9 50-11 25	18 00-20 75	15 50-18 50
" 20.....	14 85-16 25	15 30-16 50	15 90-16 50	13 15-15 35	14 25-15 15	7 15-13 75	14 00-16 00	9 50-11 25	17 50-19 00	14 00-18 75
" 27.....	13 65-15 15	14 15-15 35	14 75-15 35	13 00-14 25	13 15-14 60	7 75-13 75	12 00-14 00	9 25-11 00	19 25-17 50	13 00-18 50
May 4.....	13 40-15 10	14 00-15 25	14 75-15 35	13 15-14 25	13 25-14 50	7 85-13 75	11 00-13 00	9 25-11 00	17 50-17 25	13 00-18 25
" 11.....	13 30-15 10	14 35-15 15	14 80-15 25	13 00-13 85	13 25-14 35	8 00-13 50	10 50-12 75	9 25-11 00	17 75-17 25	12 50-15 25
" 18.....	13 35-14 25	13 75-14 45	14 00-14 50	12 85-13 75	13 00-14 25	8 00-13 50	10 50-12 75	9 00-10 50	12 00-17 00	11 75-14 75
" 25.....	13 85-14 75	14 25-14 80	14 40-14 80	12 50-13 65	13 00-13 90	7 75-13 50	11 00-13 75	9 00-10 50	14 50-17 50	9 50-13 00
June 1.....	13 85-14 50	14 10-14 60	14 40-14 60	13 15-14 25	13 75-14 60	7 75-13 00	12 25-15 00	9 00-10 75	14 25-17 00	10 50-15 00
" 8.....	14 20-15 15	14 85-15 25	14 75-15 30	16 25-17 00	16 00-17 00	8 50-14 25	13 50-15 25	9 00-10 75	13 50-17 00	10 50-14 50
" 15.....	14 40-15 90	15 60-16 00	15 40-16 00	16 25-17 00	16 00-17 00	7 00-14 25	12 75-13 75	9 00-10 75	14 00-17 50	11 50-15 75
" 22.....	14 80-16 35	15 80-16 50	15 60-16 50	16 25-17 00	16 00-17 00	7 00-14 25	12 75-13 75	8 50-10 00	13 50-17 00	8 50-12 50
July 6.....	13 50-15 75	15 00-15 85	14 75-15 85	16 10-16 85	16 00-16 85	6 50-14 50	10 75-12 25	8 50-10 00	13 00-18 75	9 50-13 50
" 13.....	13 75-16 00	15 35-16 15	15 10-16 15	16 75-17 25	16 40-17 25	6 50-11 75	12 25-14 00	8 50-10 00	13 00-18 25	9 50-13 50
" 20.....	14 80-16 50	15 90-16 55	15 60-16 65	16 10-17 00	16 25-17 15	6 50-14 90	13 00-15 50	8 50-10 00	12 50-18 25	9 00-13 00
" 27.....	13 40-15 50	14 80-15 60	14 75-15 60	16 00-16 55	16 00-17 25	6 50-14 90	15 00-17 25	8 50-10 00	12 00-18 00	9 00-13 00
Aug. 3.....	13 50-16 00	14 60-16 00	15 10-16 10	16 25-17 25	16 00-17 25	6 00-14 90	15 00-17 25	8 50-10 00	11 75-14 35	8 50-12 00
" 10.....	14 40-16 00	15 25-16 00	15 40-16 00	16 25-17 50	16 75-17 50	6 00-14 90	14 00-15 50	8 50-10 00	10 50-13 00	8 00-9 75
" 17.....	13 80-15 45	14 50-15 50	14 75-15 60	16 25-17 50	16 25-17 50	6 00-15 00	14 00-15 50	8 50-10 00	11 25-14 00	8 50-10 00
" 24.....	14 75-16 00	15 75-16 00	15 50-16 10	16 75-17 75	16 50-17 75	6 00-15 00	15 00-17 25	8 50-10 00	12 00-14 50	8 75-10 75
" 31.....	14 30-16 70	15 25-16 30	15 50-16 30	17 00-18 00	16 50-17 80	6 50-15 00	15 00-17 75	8 50-10 00	12 75-14 75	8 75-10 75
Sept 7.....	15 40-17 25	16 60-17 30	16 70-17 30	17 00-18 00	17 00-18 00	6 50-15 00	15 00-17 75	8 50-10 00	12 75-14 75	8 50-10 00
" 11.....	15 40-17 25	16 60-17 30	16 70-17 30	17 00-18 00	17 00-18 00	6 50-15 00	15 00-17 75	8 50-10 00	11 50-13 90	8 50-10 00
" 18.....	16 70-17 90	17 10-18 00	17 15-18 00	17 25-18 25	17 00-18 00	6 50-14 75	14 50-17 75	8 50-10 00	11 25-14 00	8 50-10 00
" 25.....	15 25-17 15	16 25-17 15	16 25-17 25	16 75 18 00	16 75 18 00	6 25-14 00	14 50-17 75	8 50-10 00	11 25-14 00	8 50-10 00

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OF

AGRICULTURAL STATISTICS

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OTTAWA

THOMAS MULVEY

Printer to the King's Most Excellent Majesty

1920

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No. 147

DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. CHIEF, DIVISION OF AGRICULTURAL
STATISTICS: ERNEST H. GODFREY, F.S.S. DOMINION BUREAU OF STATISTICS, OTTAWA,
CANADA.

FIELD CROPS OF CANADA.

Report for the month ended October 31, 1920.

The Dominion Bureau of Statistics issued to-day a bulletin reporting on the area, yield and value of potato, root and fodder crops for 1920, as compared with 1919, the acreage and condition on October 31 of fall wheat sown for 1921, and the progress of fall ploughing.

POTATO HARVEST OF 1920.

The potato harvest for the whole of Canada is represented by 138,527,000 bushels from an area of 784,544 acres, as compared with 125,574,900 bushels from 818,767 acres in 1919. The average yield per acre for 1920 is $176\frac{1}{2}$ bushels, which compares with $153\frac{1}{2}$ bushels last year and with 146 bushels, the decennial average for the period 1910-19. The total yield and the average yield per acre are the highest on record for Canada. By provinces, the yield per acre of potatoes is well over the decennial average throughout the Maritime Provinces, Quebec and Ontario. In the western provinces the yield per acre is below average for Manitoba, Saskatchewan and British Columbia, but is above average for Alberta. In Manitoba, the potato season has been particularly poor, and the average yield per acre is only 91 bushels, as against 126 bushels last year and 150 bushels, the decennial average. In Saskatchewan, the yield is $127\frac{1}{2}$ bushels, as against 170 bushels last year and $148\frac{1}{4}$ bushels, the decennial average. In Alberta the yield is 166 bushels, as compared with $179\frac{3}{4}$ bushels last year and $151\frac{1}{2}$ bushels the ten-year average. In British Columbia, the production has been greatly reduced through excessive rainfall during September and October, and the average yield is $184\frac{3}{4}$ bushels per acre on the area planted, as compared with 170 bushels last year and $204\frac{1}{4}$ bushels the ten-year average. The total value to farmers of the potato crop for Canada is estimated at \$134,693,000, as compared with \$118,894,200 in 1919, the price per bushel ranging from 65 cents in Prince Edward Island to \$1.39 in Manitoba. For Canada, the average price per bushel is 97 cents, as against 95 cents last year; for Quebec it is 93 cents as against 85 cents and for Ontario it is 96 cents as against \$1.37.

ROOT AND FODDER CROPS.

The total yield for Canada of turnips and other roots is estimated at 114,081,000 bushels from 290,286 acres, as against 112,288,600 bushels from 317,296 acres in 1919. The average yield per acre for

the Dominion is 393 bushels, as compared with 354 bushels last year and with 352 $\frac{1}{4}$ bushels, the average for the ten years 1910-19. Hay and clover yield 13,378,800 tons from 10,379,292 acres, as compared with last year's record total of 16,348,000 tons from 10,595,383 acres. The yield per acre this year is 1.30 ton, as compared with 1.55 ton last year and 1.50 ton, the decennial average. Alfalfa yields 616,700 tons from 238,556 acres, as compared with 494,200 tons from 226,869 acres last year, the yield per acre being 2.60 tons, as against 2.20 tons last year, and 2.40 tons, the ten-year average. Fodder corn shows a yield of 5,404,000 tons from 588,977 acres, an average of 9.15 tons, as against 9 $\frac{3}{4}$ tons last year, and 8.8 tons, the decennial average. The total yield of sugar beets is 314,000 tons from 36,288 acres, as compared with 240,000 tons from 24,500 acres in 1919, an average of 8.65 tons, as compared with 9.80 tons last year and 9.10 tons, the ten-year average. The total area under root and fodder crops, including potatoes, turnips, etc., hay and clover, alfalfa, fodder corn and sugar beets, amounts to 12,317,943 acres, as compared with 12,494,584 acres in 1919. The total value of these crops, at local prices paid to farmers, amounts for 1920 to \$584,639,500, as compared with \$560,151,800 for 1919. The average price per ton for hay and clover for Canada is \$25, as against \$20.72 last year, the price for 1920 constituting the highest on record.

FALL WHEAT AND FALL PLOUGHING.

The total area sown to fall wheat in Canada for the season of 1921 is estimated to be 792,200 acres, as compared with 846,800 acres, the area sown in 1919 for 1920, and with 814,133 acres, the area harvested. This is a decrease of 54,600 acres, or 6 per cent, from the area sown, and of 21,933 acres, or 3 per cent, from the area harvested. In Ontario, the area sown is 738,500 acres, as compared with 794,100 acres, a decrease of 7 per cent. In Alberta, there is an increase shown of from 38,400 acres to 38,800 acres, or 1 per cent. In British Columbia, the acreage is 14,900, as against 14,300, an increase of 600 acres, or 4 per cent. The crop is reported as having made good growth, its condition on October 31 being given, in percentage of the decennial average, as 102 for all Canada, 102 for Ontario, 93 for Alberta, and 104 for British Columbia.

On the whole, excellent progress has been made this fall in the ploughing of land intended for next year's crops. In the Maritime Provinces, the percentage ranges from 57 in Nova Scotia to 81 in Prince Edward Island, only Nova Scotia falling behind the proportions of the two previous years. In Quebec, the percentage fall ploughed is 88 as against 87 last year and 62 in 1918. In Ontario 73 per cent has been ploughed, as against 77 per cent last year and 64 per cent in 1918. In Manitoba the excellent proportion of 83 per cent was reached, which compares with 64 per cent last year, 54 per cent in 1918 and 40 per cent in 1917. Saskatchewan accomplished 45 per cent, or nearly half, this proportion being larger than in any year since 1914, when it was 77 per cent. In Alberta the proportion

is 29 per cent as against 24 per cent last year and 35 per cent in 1918. In British Columbia 65 per cent has been ploughed, as against 56 per cent last year and 48 per cent in 1918. For the whole of Canada, the percentage is 71, as against 66 last year, this year's percentage being larger than in any year since 1914, when the same percentage of 71 preceded the bumper harvest of 1915. The amount of land which it is possible to plough in the fall has usually an important bearing upon the next year's harvest; so that the prospect to this extent is favourable.

Dominion Bureau of Statistics,
Ottawa, October 29, 1920.

ERNEST H. GODFREY,
Chief, Division of Agricultural
Statistics.

I. Area, Yield and Value of Potato, Root and Fodder Crops, 1919 and 1920.

Field Crops.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
	acres.	bush.	bush.	\$ c.	\$
Canada—					
Potatoes.....1919	818,767	153.50	125,574,900	0.95	118,894,200
.....1920	784,544	176.50	138,527,000	0.97	134,693,000
Turnips, etc.....1919	317,296	354.00	112,288,600	0.50	54,958,700
.....1920	290,286	393.00	114,081,000	0.47	53,659,600
		tons.	tons.		
Hay and clover.....1919	10,595,383	1.55	16,348,000	20.72	338,713,200
.....1920	10,379,292	1.30	13,378,800	25.07	335,348,200
Fodder corn.....1919	511,769	9.75	4,942,760	6.92	34,179,500
.....1920	588,977	9.15	5,404,000	7.78	42,031,000
Sugar beets.....1919	24,500	9.80	240,000	10.86	2,606,000
.....1920	36,288	8.65	314,000	12.80	4,018,000
Alfalfa.....1919	226,869	2.20	494,200	21.85	10,800,200
.....1920	238,556	2.60	616,700	24.14	14,889,700
Prince Edward Island—		bush.	bush.		
Potatoes.....1919	36,234	125.00	4,529,000	0.85	3,850,000
.....1920	36,322	185.50	6,739,000	0.65	4,372,000
Turnips, etc.....1919	12,337	518.00	6,396,000	0.26	1,638,800
.....1920	9,397	481.75	4,529,000	0.37	1,678,000
		tons.	tons.		
Hay and clover.....1919	237,883	1.80	428,000	20.00	8,564,000
.....1920	243,394	1.55	376,000	23.23	8,733,000
Fodder corn.....1919	522	12.00	6,260	8.00	50,000
.....1920	190	8.00	1,500	10.00	15,000
Nova Scotia—		bush.	bush.		
Potatoes.....1919	62,060	161.00	9,992,000	1.09	10,891,000
.....1920	50,092	203.75	10,209,000	0.98	9,966,000
Turnips, etc.....1919	30,291	537.75	16,289,000	0.60	9,773,000
.....1920	19,946	431.75	8,611,000	0.62	5,368,000
		tons.	tons.		
Hay and clover.....1919	678,357	2.10	1,425,000	22.34	31,835,000
.....1920	632,069	1.50	948,000	26.25	24,966,000
Fodder corn.....1919	2,960	9.50	28,000	8.00	224,000
.....1920	1,451	8.00	11,600	10.00	116,000
New Brunswick—		bush.	bush.		
Potatoes.....1919	75,573	142.75	10,790,200	0.97	10,466,000
.....1920	78,335	198.00	15,510,000	1.08	16,751,000
Turnips, etc.....1919	24,279	366.50	8,898,800	0.58	5,155,000
.....1920	20,030	353.00	7,070,500	0.69	4,879,000

I. Area, Yield and Value of Potato, Root and Fodder Crops, 1919 and 1920—con.

Field Crops.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
	acres.	bush.	tons.	\$ c.	\$
New Brunswick—con.					
Hay and clover.....1919	786,175	1.40	1,111,000	20.26	22,512,000
.....1920	726,380	1.20	871,700	27.87	24,294,000
Fodder corn.....1919	5,906	5.00	30,000	8.00	240,000
.....1920	5,243	8.00	42,000	10.00	420,000
Quebec—					
Potatoes.....1919	315,590	bush. 181.50	bush. 57,280,000	0.85	48,688,000
.....1920	310,692	185.50	57,633,000	0.93	53,599,000
Turnips, etc.....1919	87,496	317.50	27,780,000	0.53	14,723,000
.....1920	83,613	329.25	27,530,000	0.58	15,967,000
Hay and clover.....1919	4,299,360	tons. 1.50	tons. 6,449,000	20.54	132,462,000
.....1920	4,290,121	1.25	5,363,000	26.56	142,441,000
Fodder corn.....1919	74,007	8.25	611,000	8.41	5,139,000
.....1920	86,833	8.00	695,000	10.20	7,089,000
Alfalfa.....1919	28,488	2.35	67,000	14.22	953,000
.....1920	28,200	2.40	68,000	20.72	1,409,000
Ontario—					
Potatoes.....1919	157,286	bush. 96.30	bush. 15,145,000	1.37	20,820,000
.....1920	157,509	176.50	27,783,000	0.96	26,587,000
Turnips, etc.....1919	123,029	348.00	42,756,000	0.35	14,027,000
.....1920	119,744	464.50	55,619,000	0.28	15,586,000
Hay and clover.....1919	3,508,266	tons. 1.59	tons. 5,589,000	20.61	115,161,000
.....1920	3,533,740	1.25	4,470,000	24.30	108,629,000
Fodder corn.....1919	399,549	10.05	4,014,000	6.30	25,304,000
.....1920	449,176	9.75	4,428,500	6.85	30,284,000
Sugar beets.....1919	24,500	9.80	240,000	10.86	2,606,000
.....1920	36,288	8.65	314,000	12.80	4,018,000
Alfalfa.....1919	146,790	2.14	314,400	20.20	6,351,000
.....1920	162,820	2.65	428,400	23.80	10,196,000
Manitoba—					
Potatoes.....1919	42,000	bush. 126.00	bush. 5,287,500	0.81	4,266,000
.....1920	37,000	91.00	3,368,000	1.39	4,672,000
Turnips, etc.....1919	6,045	184.00	1,113,000	0.60	663,000
.....1920	7,404	153.50	1,137,000	0.92	1,044,000
Hay and clover.....1919	260,378	tons. 1.50	tons. 401,400	16.99	6,818,000
.....1920	208,512	1.30	269,200	15.90	4,303,000
Fodder corn.....1919	16,867	6.80	114,500	13.28	1,520,000
.....1920	17,042	4.50	76,100	18.81	1,433,000
Alfalfa.....1919	5,181	2.20	11,400	22.40	256,200
.....1920	3,679	3.10	11,500	22.92	263,600
Saskatchewan—					
Potatoes.....1919	66,176	bush. 170.00	bush. 11,250,000	0.89	10,013,000
.....1920	53,814	127.50	6,861,000	1.11	7,616,000
Turnips, etc.....1919	13,932	257.75	3,591,000	1.12	4,022,000
.....1920	10,449	301.00	3,145,000	0.94	2,956,000
Hay and clover.....1919	265,417	tons. 1.05	tons. 279,000	17.00	4,743,000
.....1920	234,532	1.40	328,300	14.06	4,616,000
Fodder corn.....1919	6,690	12.50	84,000	12.50	1,050,000
.....1920	16,685	3.75	62,600	18.00	1,127,000
Alfalfa.....1919	11,526	1.60	18,400	27.50	506,000
.....1920	10,473	2.25	23,600	20.00	472,000

I. Area, Yield and Value of Potato, Root and Fodder Crops, 1919 and 1920—concluded.

Field Crops.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
	acres.	bush.	bush.	\$ c.	\$
Alberta—					
Potatoes..... 1919	45,848	179.75	8,241,200	0.83	6,840,200
1920	43,000	166.00	7,138,000	0.97	6,924,000
Turnips, etc..... 1919	12,500	221.50	2,768,800	1.06	2,934,000
1920	12,300	261.75	3,219,500	1.11	3,573,600
		tons.	tons.		
Hay and clover..... 1919	433,296	1.10	476,600	20.89	9,956,200
1920	383,527	1.30	498,600	17.00	8,476,200
Fodder corn..... 1919	900	5.58	5,000	10.50	52,500
1920	7,644	4.25	32,500	18.00	585,000
Alfalfa..... 1919	21,553	2.00	43,000	29.16	1,254,000
1920	19,906	2.25	44,800	26.50	1,187,200
British Columbia—		bush.	bush.		
Potatoes..... 1919	18,000	170.00	3,060,000	1.00	3,060,000
1920	17,780	184.75	3,286,000	1.28	4,206,000
Turnips, etc..... 1919	7,387	365.00	2,696,000	0.75	2,022,000
1920	7,403	435.00	3,220,000	0.81	2,608,000
		tons.	tons.		
Hay and clover..... 1919	126,251	1.50	189,000	35.25	6,662,000
1920	127,017	2.00	254,000	35.00	8,890,000
Fodder corn..... 1919	4,368	11.50	50,000	12.00	600,000
1920	4,713	11.50	54,200	17.75	962,000
Alfalfa..... 1919	13,331	3.00	40,000	37.00	1,480,000
1920	13,478	3.00	40,400	33.71	1,361,900

II. Area estimated to be sown to Fall Wheat in 1920, compared with 1919, and condition on October 31, 1918, 1919 and 1920.

NOTE.—For condition, 100 = promise of a yield per acre equal to the average annual yield per acre of the ten years 1910-19.

Province.	1919.	1920.	Increase (+) or Decrease (—)	Condition on October 31.		
	Area Sown.	Area Sown.		1918.	1919.	1920.
	acres.	acres.	p.c.	p.c.	p.c.	p.c.
Canada.....	846,800	792,200	—6	102	104	102
Ontario.....	794,100	738,500	—7	102	107	102
Alberta.....	38,400	38,800	+1	98	98	93
British Columbia.....	14,300	14,900	+4	98	97	104

III. Progress of Fall Ploughing, 1917-1920.

NOTE.—100 = area of land intended for next year's crop.

Provinces.	1917.	1918.	1919.	1920.	Provinces.	1917.	1918.	1919.	1920.
	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.
Canada.....	53	56	66	71	Ontario.....	47	64	77	73
Prince Edward Island	76	75	82	81	Manitoba.....	40	54	64	83
Nova Scotia.....	57	63	68	57	Saskatchewan.....	37	39	30	45
New Brunswick.....	58	68	68	69	Alberta.....	38	35	24	29
Quebec.....	67	62	87	88	British Columbia.....	51	48	56	65

IV. Percentage of Land under Summer Fallow, as compared with previous years, 1917-1920.

NOTE.—100 = area under summer fallow in the previous year.

Provinces.	1917.	1918.	1919.	1920.	Provinces.	1917.	1918.	1919.	1920.
	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.
Canada.....	90	90	94	94	Ontario.....	86	90	100	92
Prince Edward Island	98	96	84	93	Manitoba.....	97	96	94	97
Nova Scotia.....	89	90	92	90	Saskatchewan.....	97	89	98	96
New Brunswick.....	80	83	91	95	Alberta.....	94	84	85	96
Quebec.....	81	91	95	93	British Columbia.....	75	81	100	86

CROP REPORTS FROM THE PROVINCES.

Summarized from Reports of Crop Correspondents, October 31, 1920.

Prince Edward Island.—October was a very dry month, stopping the growth of roots and making the ground very difficult to plough. A certain amount of rot has become evident in potatoes, and the turnips are small and woody. Aftergrass is a failure and water is so scarce that in places farmers have had to haul water for the stock.

Nova Scotia.—Potatoes gave a big yield, but everywhere rot is complained of. Turnips are not up to last year. Hay and clover is a lighter crop than usual, but is of good quality. It has been too dry for the usual amount of fall ploughing.

New Brunswick.—Potatoes are an uneven crop, large yields in one place and very poor ones close at hand. A great deal of rot has developed. October has been a fine month for harvesting roots and apples.

Quebec.—The harvesting of field crops was accomplished under favourable conditions, and the yield of all grain crops was very satisfactory. There is a scarcity of hay. In some instances, potatoes are large and an abundant yield, but in general great quantities are affected by rot. Fall ploughing is well advanced everywhere in the province, notwithstanding that the land, in some parts, was dry and hard to work.

Ontario.—Potatoes have proved a record crop, but there has been a great deal of rot, both in the fields and in the cellars. Roots of all kinds have yielded excellently, but the acreage is smaller and will probably continue so if labour does not become more plentiful. Corn, too, yielded abundantly, and silos are well filled, so that the feed prospect for the winter is satisfactory. Fall wheat areas are slightly smaller, but the growing crop was in the best of condition at the end of October. Fall ploughing was backward, as the rush of fall work was so great. Summer fallowing and other forms of soil improvement are being somewhat neglected owing to scarcity of help. More attention is being given to the raising of sweet clover. Pastures at the end of the month were very good and the stock thriving. Three districts reported the presence of the corn borer.

Manitoba.—It has been a very poor year for potatoes and other roots. Potatoes are small and scarce, owing to frosts and drought, but the quality is good. Already some districts have had to import. Turnips gave a poor yield also. Prairie hay is none too plentiful. October has been a very favourable month for fall work. An unusually large amount of ploughing has been done.

Saskatchewan.—Potatoes have given a yield below average, but they are of good quality. Turnips have done better. Fodder corn has yielded very poorly, partly owing to frosts. Threshing is later than usual, and fall ploughing has been delayed; nevertheless a larger amount than usual has been ploughed. The weather has been favourable and the ground in good shape. Fall rye has made a good start. The fodder supply is fair.

Alberta.—At the end of the month threshing was not completed in many districts. The ground was dry and the amount of fall ploughing completed was not great. Potatoes were an over average crop of good quality. Slough hay was as a rule plentiful; so that in most parts of the province there should be no shortage of winter feed. Roads were in good shape for haulage. A correspondent at Macleod makes the following statement: "Summer fallowing and fall ploughing have practically been abandoned in the drift belt, farmers having made up their minds to sow less acreage and spring plough as much of it as possible. This procedure is expected to minimize drifting and hamper the Russian Thistle."

British Columbia.—Heavy rains injured roots and corn and resulted in a great loss of potatoes in low lands. A correspondent from the Fraser valley says: "Serious loss of cattle caused by eating sprouted grains, this causing fermentation in the stomach."

CROP REPORTS FROM PROVINCIAL GOVERNMENTS.

Ontario.—The Department of Agriculture reports (November 9) that the rains of the early part of last week have given an impetus to fall ploughing in many quarters where the work had been slowed down owing to the dry and hard condition of clay soils. While some farmers are through with this work it will take many fully another week to turn under the acreage planned for. Sweet clover has been a disappointment with some growers in the northern part of Peel, where it is said some of the crop has been burned owing to the poor market prospects and the uneven ripening of seed.

Manitoba.—The Department of Agriculture reports (October 29) that threshing is practically all finished, although a few scattered lots of flax are yet unthreshed. Now that threshing is done, reports of correspondents as to yields should be fairly accurate. The averages of all reports submitted are as follows: Wheat just below 15 bushels; oats, $33\frac{5}{8}$; barley, $22\frac{1}{10}$; flax, $8\frac{2}{5}$; rye, $16\frac{1}{5}$; potatoes, just over 100. October has been a very fine month, and, on the whole, the conditions for ploughing have been excellent, and a larger area—in some places a much larger area—than usual is ploughed. On the whole, the land

is well moistened for next year, and fall work in the fields is very satisfactorily advanced. Though ploughing has been delayed here and there, many farmers some time ago finished their fall ploughing, and the soil in the major part of Manitoba has just been right to germinate wild oats and other annual seeds, and so clean the land.

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—With the exception of the first three days of the month and also the period from the 24th to the 27th, October has been an ideal fall month, with fine, mild days and very little frost even at night. The highest temperature recorded is 73, the lowest 29, and the mean temperature is 51·34; while a year ago the maximum was 75, the minimum 25, and the mean 45·71. Although there have been showers on twelve days, the precipitation totals only 2·82 inches, as against 4·91 inches for the corresponding period of 1919. The bright sunshine, of which there has been much more than usual, averages 5·54 hours a day, compared with 4·05 hours daily for the previous October.

At the Experimental Farm, an area of about four acres of potatoes, dug about the middle of October, yielded at the rate of upwards of 400 bushels to the acre, but considerable rot has been in evidence in the tubers. Mangolds and turnips, which were pulled towards the end of the month, have given the heaviest yields recorded for many years.

Charlottetown, P.E.I.—J. A. CLARK, Superintendent, reports: "October has been exceptionally fine, with a total of 160·4 hours of bright sunshine, which is the highest record for sunshine of any October since the Station was started in 1909. The rainfall totals 0·6 of an inch, made up of nine light showers. The month has been exceptionally free from frosts, the lowest temperature, recorded on the 21st, being 31. The exceptional weather has made it possible to complete more autumn ploughing and fall work than during any previous year that can be remembered. The pastures have been somewhat dry, but the clover in the hay fields was not injured by frost, and, as the ground has been firm, the stock, which was allowed in many cases to run in the hay fields, is in first-class shape to go into winter quarters. Potatoes have turned out well, except that in many sections there has been quite a little scab as well as a lot of dry rot among the early varieties. Owing to the drought, the turnip crop will be below the average, but carrots and mangolds are good. At the Experimental Station, a start has been made in erecting a wagon shed, and a number of additional poultry contest houses have been built. The second Charlottetown Egg-laying Contest closed on the 29th, with two pens of White Leghorns in the lead, the highest individual birds also being Leghorns. The new Contest, which starts November 1, is made up of thirteen pens of Barred Rocks, nine of White Leghorns, and three of White Wyandottes."

Kentville, N.S. W. S. BLAIR, Superintendent, reports:—"October has been a remarkable month as to temperatures, frost being registered but twice, namely, during the nights of the 16th and 21st, when the thermometer dropped to 30. The mean temperature is 50.91, compared with 45.2 in 1919, and an average October mean of 47.6 for the six years from 1914 to 1919. The precipitation recorded on five days totals 0.69 of an inch, compared with an average of 4.66 inches for the corresponding period during the six previous years. The bright sunshine aggregates 182.5 hours, whereas the average from 1914 to 1919 figures out 148.8 hours. Conditions have been ideal for the harvesting of apples and other fall crops, which have been gathered in excellent condition; and the proportion of apples of No. 1 quality is greater than usual. The mild weather which has prevailed has favoured the grass, and, in spite of the drought, pastures, particularly on the dyked areas, have remained in good shape, and live stock is in good condition. As a consequence of the ground being too dry to facilitate the work, the usual amount of fall ploughing has not been done. Springs and wells not previously known to run out this season of the year, are either dry or getting very low, and, should winter set in without rains, a shortage of water during the winter might result."

Nappan, N.S.—W. W. BAIRD, Superintendent, reports: "October has been an ideal autumn month, with 146.6 hours of bright sunshine and a mean temperature of 50.04, the highest since 1913. The precipitation totals 0.50 of an inch, four light showers being recorded. Conditions have been very favourable for the harvesting of late sown grains, which should give good returns; also for the digging of potatoes which are an average crop, with, however, much rot in evidence. Late apples which were picked during the month, are a light crop, but the fruit is of good quality. Except possibly in the case of apples, prices of most farm produce have taken a downward turn,—beef, for instance, dropping several cents a pound. The market for hay, however, continues to be good."

Fredericton, N.B.—W. W. HUBBARD, Superintendent, reports: "As a whole, the weather during October has been as nearly perfect as could be expected. Fine warm days, with but three slight frosts, and enough rain to keep soil conditions right, favoured the farmer in every way. The potato harvest was completed early, and roots have been largely pulled by the end of the month. Conditions, perhaps, encouraged the rotting of potatoes, a trouble very general over the province. It now looks as if stores of sound potatoes in New Brunswick would not total more than one-half the quantity usually held on November 1. Even the most thorough spraying with Bordeaux mixture has not entirely prevented "late blight" ravages, and spraying, as generally conducted, has given only partial benefit. The apple crop, while light, is of good quality and in good demand. Pastures have continued good, and live stock is in better condition than usual."

Ste. Anne de la Pocatière, Que.—JOS. BEGIN, Superintendent, reports: "October has been milder and brighter than usual. The

highest temperature recorded is 68.2, the lowest 28.5, and the mean temperature 46.5; compared with extremes of 64.4 and 24.2 and a mean of 42.4 last year. The precipitation totals 3.69 inches, falling on twelve days. The bright sunshine averages 4.6 hours a day, compared with 3.5 hours in 1919. The potato crop, which is an important one in this part of the country, has been dug in good condition. During the latter part of the month, most of the root crop at the Station has been harvested. Mangolds have not done so well this year as last,—a four-acre field yielding only 18 tons per acre, which is below the average. Swede turnips have done much better, yielding on an average, over 29 tons per acre. The potato crop at the Station, and also in the surrounding district, is a little below the average. The favourable weather has enabled farmers to make good progress with their fall ploughing during the latter part of the month."

Cap Rouge, Que.—G. A. Langelier, Superintendent, reports: "The meteorological records at the Station show that October has been milder, wetter and brighter than the average of the corresponding period for the previous eight years, the figures being, respectively, 50.15 and 42.57 for the mean temperature, 4.70 and 4.38 inches for the precipitation, and 134.1 and 98.7 hours for the bright sunshine. The autumn has been one of the most favourable ever experienced in this district, with flowers still blooming in many gardens at the end of October. The fine weather enabled farmers to complete practically all their fall work. At the Station, the ploughing has been finished and all the grain has been threshed."

Lennoxville, Que.—J. A. McClary, Superintendent, reports: "The highest temperature recorded during October is 72, the lowest 25, and the mean 49.75; while, a year ago, the maximum was 74, the minimum 18, and the mean 43.93. The first snow of the season fell on the 29th. The precipitation totals 2.55 inches. Last year, October was very dull and wet, with rain falling on fourteen days, and the precipitation amounting to 6.63 inches. The bright sunshine totals 149.6 hours, compared with 103 hours for the corresponding period last year. The weather throughout October has been unusually fine and mild, with very little frost. Conditions have been very beneficial to farmers, as feed in the pastures has been green and live stock has thrived well,—which has meant a great saving in grain feeds, especially as regards dairy cattle; and, furthermore, it has been possible to get a great deal of fall ploughing completed. At the Station, swedes have all been harvested, giving a good average yield."

Brandon, Man.—W. C. McKillican, Superintendent, reports: "October has been a pleasant month, with no storms and very little frost, the average temperature, 43.8, being the highest mean since 1914. Conditions have been favourable for fall ploughing, and more of this has been done than for some years. Those whose threshing had been delayed by showers in September were enabled to finish it up during the opening days of October. At the Experimental Farm, the harvesting of an exceptionally good crop of mangolds was completed early in the month."

Indian Head, Sask.—N. D. MACKENZIE, Superintendent, reports: "The October rainfall of 1.67 inch, while not interfering seriously with threshing operations, has put the ground in splendid shape, more moisture being present than for any fall during the past four years. Threshing has been completed and more fall ploughing than usual has been done. Owing to the rather wet weather which has prevailed, a great many summer-fallows are very weedy, and it will involve considerable work to put them in shape. Wheat and barley have been an average crop, but oats are below normal, both in yield and quality. Corn and sunflowers, owing to frosts, have yielded less than usual; but root crops have done considerably better than ordinarily. Potatoes are below the average in yield, but the tubers are of excellent quality. Owing to the open fall, a great deal of extra work has been done on the Experimental Farm, and the approaching winter finds things in better shape than for a number of years past. The bulk of next year's summer-fallow has been manured and ploughed this fall."

Rosthern, Sask.—WM. A. MUNRO, Superintendent, reports: "The first severe frost of the season occurred nearly a month later than usual, namely, on October 3, when the thermometer dropped to 26.8. The mild weather which prevailed up to that date made it possible for all sorts of garden crops to mature, especially pumpkins, squashes, tomatoes and corn,—one pumpkin grown at the Station weighing 44½ pounds. The open October has made it possible for a great deal of fall ploughing to be done, while the considerable rainfall during the latter part of the month has left the ground in splendid condition for next spring. At the Station, a pumphouse, 24 by 30 feet, has been erected, with a view to installing a strong pump and air-pressure water tank to supply water for the various buildings. The copious rains and mild weather have induced a vigorous second growth on the stubble fields; this affords splendid fall pasture and should be a considerable factor in solving the feed problem for the coming winter."

Scott, Sask.—M. J. TINLINE, Superintendent, reports: "Unsettled weather has prevailed throughout the greater part of October. Threshing has been delayed and, at the end of the month, probably one-tenth of the crop is still in stook. The mean temperature, 40.63, is above the average for this period. The bright sunshine totals 185.9 hours, the most ever recorded at this Station during October. Owing to delayed threshing operations having had to be attended to, very little fall ploughing has been done. At the Experimental Station, autumn work on the land was completed in good season. The Station live-stock population has been augmented by the addition of four Percheron brood mares and one Percheron filly, six Yorkshire sows, and a carload of feeder steers."

Lacombe, Alberta.—F. H. REED, Superintendent, reports: "The weather during October has been such as would indicate that this part of the country has well merited being called "Sunny Alberta," as there has been a succession of fine, mild days. As a result of these favourable conditions, a large acreage has been ploughed and fall work in general is well advanced. Farmers are commencing to

haul hay, which is being sold for somewhat less than has been the case for some time. The prices of coarse grains and mill feeds are also lower; while, at the provincial live stock sales, sheep have been selling at but little more than half what they commanded last year; but there is a keen demand for dairy cows and breeding swine, and the prices of these have remained firm. During the month, work has been commenced on the construction of a house for the assistant to the superintendent, and of a cottage for the Farm foreman."

Lethbridge, Alberta.—W. H. FAIRFIELD, Superintendent, reports: "The weather during October has been dry. The few storms that have been experienced interfered very little with threshing operations in this immediate section. It is so dry that farmers are unable to do fall ploughing. Live stock is doing well, owing to the open, mild weather which has prevailed. The potato crop has been disappointing, and, even on the irrigated farms, the yield has been less than normal. Hay seems to be moving fairly well. At the Station, the fall work is pretty well cleaned up, but it has not been possible to do much work on the land, owing to the extreme drought."

Invermere, B.C.—R. G. NEWTON, Acting Superintendent, reports: "The weather during October has been more or less dull, with strong winds during the earlier part of the month. The rainfall totals only 0.39 of an inch, which is only about half the average. The bright sunshine aggregates 113.5 hours, which is much below the average. All fall ploughing is finished, and preparatory work for winter is well under way."

Summerland, B.C.—R. H. HELMER, Superintendent, reports:—"October has been fine and warm. The first frost was recorded on the 20th, and the thermometer dropped to 25 on the last night of the month. In the district, the crops have all been harvested in good time, the yields, as a rule, being light, owing to the shortness of the season. Roads, hereabouts, are in good condition, having been improved by fall rains settling the dust. Fall ploughing has been practically all done. At the Station, experiments in the winter feeding of beef cattle will start early in November."

Agassiz, B.C.—W. H. HICKS, Superintendent, reports:—"The unusually wet weather experienced in September continued into October. With the exception of two days, it rained daily up to the 23rd; and the precipitation for the month totals 11.35 inches. With the exception of the corresponding period in 1918, when 14.85 inches of rain fell, this constitutes the wettest October for twenty years. The total precipitation for September and October this year amounts to 33.77 inches, which fell between September 8 and October 28. The unusual precipitation during the two months has been the direct cause of considerable loss of crops. It is estimated that from 25 per cent to 50 per cent of the grain in the Fraser valley was destroyed. Not only is the grain a loss, but also the straw. A smaller percentage of the potato crop, which has been a good one, has rotted in the ground. At the close of the month, practically all the corn has been siloed, and a good start made at pulling the roots. The labour involved in harvesting these crops has been greatly increased on

account of the wet condition of the fields and roads. Live stock, generally, is in good condition. The demand for finished hogs has been brisk, with prices remaining firm. Beef cattle, grade dairy cattle and mutton sheep are in very poor demand. Dairy products show very little change in price. Eggs are selling around the dollar mark."

Sidney, Vancouver Island, B.C.—LIONEL STEVENSON, Superintendent, reports:—"The weather during October has been very unfavourable for agriculture, constant rains interfering greatly with all farm operations. The soil being very wet, difficulty has been experienced in harvesting the roots, potatoes and corn. At the end of the month, a portion of the grain crop is still standing in stook. Some ploughing has been done on sod land, but no autumn grain has been sown during the month. Pastures improved and have been in better condition than usual. The live stock of the district is in good condition, but there is no surplus stock for either breeding or feeding. A light apple crop of excellent quality has been gathered. The plantation of small fruits has made good growth. Some difficulty in harvesting the late ripening crops has been experienced by growers of vegetable seeds. The poultry and dairy interests have experienced a very good month, with prices of their products remaining high and feeds lowering in cost. Good dairy cows, pullets and young pigs have been in very active demand."

Meteorological Record for October, 1920.

The records of temperature, precipitation and sunshine at the several Experimental Farms and Stations for the month of October are given in the following table:

Experimental Farm or Station at—	Degrees of Temperature F.			Precipitation in inches.	Hours of Sunshine.	
	Highest.	Lowest.	Mean.		Possible.	Actual.
Ottawa, Ont.....	73.0	29.0	51.34	2.82	339	171.9
Charlottetown, P.E.I.....	71.0	31.0	50.95	0.60	339	160.4
Kentville, N.S.....	78.0	30.0	50.91	0.69	339	182.5
Nappan, N.S.....	75.0	26.0	50.04	0.50	339	146.6
Fredericton, N.B.....	72.0	28.0	51.20	3.04	338	179.9
Ste. Anne de la Pocatière, Que.....	68.2	28.5	46.50	3.69	336	143.5
Cap Rouge, Que.....	67.0	30.2	50.15	4.70	339	134.1
Lennoxville, Que.....	72.0	25.0	49.75	2.55	339	149.6
Brandon, Man.....	85.0	17.0	43.80	0.80	333	147.9
Indian Head, Sask.....	84.0	20.0	42.80	1.67	331	138.0
Rosthern, Sask.....	78.8	19.3	42.96	1.60	334	171.9
Scott, Sask.....	79.7	15.2	40.63	0.54	335	185.9
Lacombe, Alberta.....	78.0	9.4	39.67	0.72	328	155.1
Lethbridge, Alberta.....	83.5	19.0	42.50	0.99	331	150.3
Invermere, B.C.....	67.0	13.0	38.80	0.39	332	113.5
Summerland, B.C.....	61.0	25.0	44.90	1.66	333	125.5
Agassiz, B.C.....	63.0	30.0	46.77	11.35	334	62.3
Sidney, Vancouver I., B.C.....	57.0	35.0	46.60	4.03	335	83.6

Ottawa, November 17, 1920.

E. S. ARCHIBALD,
Director Experimental Farm

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Ministry of Agriculture reports (November 1) that very little rain fell during October, but mists and heavy dews were fairly common, and there was little wind to dry the outstanding grain. The weather was therefore favourable for the seasonal work of potato and root lifting, autumn cultivation and sowing. The grain harvest has been very protracted by the damp weather, and in many parts of the country, apart from the east and southeast, was only completed towards the end of October, whilst in the north, in Wales and in a few other isolated districts, there is still an appreciable quantity of barley and oats in the fields. Much of the crop harvested during October was secured in damp condition and heated stacks are not uncommon, while in the extreme northeast some sprouting occurred. On the whole the crops may be said to have been harvested in moderate condition; in the east and southeast most were fairly well secured. Potatoes are now being lifted, and in many districts this work is nearly completed, though, owing to the late harvest, it is hardly so forward as usual on the whole. So far the tubers have been got up in good condition, but they are very frequently small, and there is a good deal of disease. Mangolds are being pulled in most districts, but generally little of this work had been done by the end of October. The roots are sound but rather small. Turnips and swedes improved during the month, and are still growing.

Scotland.—The Board of Agriculture reports (November 1) that the weather during October was favourable for the completion of harvest work in Shetland, Orkney, Moray, and Banff, while in the western and southwestern counties and in the Lothians and Peebles it was good for the most part. In these districts the cereal crops were secured generally in good order, and potatoes were lifted and stored in dry condition.

India.—The Indian Department of Statistics issued (August 10) its final general memorandum on the wheat crop of 1919-20. This shows a total yield of 376,768,000 bushels from 29,976,000 acres, as against 280,272,000 bushels from 23,798,000 acres last year, an increase in yield of 34.4 p.c., and in area of 26 p.c. The area is 6.2 p.c. below the average of the preceding five years and the yield is 5.4 p.c. above it.

United States.—The Crop Reporting Board of the U. S. Department of Agriculture issued (November 8) estimates of the production, quality and value of the field crops of 1920, as follows:

Crops.	Yield per acre.		Total Yield.			Quality.	Price.	
	1920 preliminary.	Average. ¹	1919.	1920.	Average 1914-18.	1920.	1919.	1920.
	bush.	bush.	000 bush.	000 bush.	000 bush.	p.c.	cents.	cents.
Corn.....	30.9	26.1	2,917,450	3,199,126	2,760,484	89.6	133.4	87.3
Wheat.....	14.0	14.6	940,987	750,648	822,246	92.4	213.2	188.0
Oats.....	35.2	32.1	1,248,310	1,444,411	1,414,558	93.3	68.7	54.5
Barley.....	25.7	25.1	165,719	191,386	214,819	88.2	117.1	81.7
Rye.....	14.2	15.5	88,478	77,893	59,933	93.0	129.8	142.1
Buckwheat....	19.0	19.1	16,301	14,321	15,305	92.9	151.0	131.0
Potatoes.....	109.4	95.2	357,901	421,252	382,113	88.8	152.8	118.3
Sweet potatoes	103.4	94.8	103,579	105,676	74,983	89.9	143.9	122.1
Flaxseed.....	6.3	7.5	8,919	10,736	12,922	89.8	382.3	240.1
Rice.....	38.9	—	41,059	52,298	33,360	—	—	—
	lb.	lb.	lb.	lb.	lb.			
Tobacco.....	793.9	813.6	1,389,458	1,476,444	1,187,708	75.8	—	—
	tons.	tons.	tons.	tons.	tons.			
Hay, all.....	14.6	1.34	108,666	106,451	99,304	92.7	\$19.36	\$17.45
Sugar beets....	9.02	10.3	6,421	8,812	6,051	—	—	—

¹Mostly ten-year average.²Forecast from condition on November 1.

The corn crop is the largest on record, the previous highest yield being 3,124,746,000 bushels in 1912.

The Bureau also reports (November 4) that the bulk of the winter wheat acreage has been sown, and early-sown fields are up and looking well. Some of the later-sown fields have suffered from lack of moisture which has also reduced the acreage in some sections. Hessian fly is reported in many localities of Indiana, Illinois and Missouri, but is being checked by recent frosts and cold weather.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

YIELD OF CEREALS IN NORTHERN HEMISPHERE, 1920.

According to the October issue of the International Crop Report, the yield of the principal cereals in countries of the northern hemisphere for 1920 is as follows:

Crop.	Number of Countries.	Per cent of World's Total.	Bushels.	Per cent of 1919.	Per cent of Average 1914-18.
Wheat.....	16	60	2,087,097,000	100.8	98.3
Rye.....	10	12	219,445,000	104.0	121.8
Barley.....	14	45	583,471,000	108.2	95.0
Oats.....	14	57	2,482,471,000	121.4	109.3

CONDITION OF CROPS.

Ireland.—Light grain yields are indicated owing to want of sunshine and heat. Potatoes are variable in yield, the general opinion being that the production will be less than that of last year.

British India.—Latterly the monsoon has been active in many parts of India, though more rain is still needed in the Punjab and the United Provinces for wheat sowing.

France.—Up to the last week in September the weather in many departments had been too dry, but beneficial rains subsequently enabled farmers to proceed with ploughing and sowing for the next crop, and autumn preparations have become general.

Algeria.—Persistent drought has seriously reduced the yield of potatoes in the department of Algiers.

Italy.—During the latter half of September there were beneficial rainfalls, though in the southern provinces they were not sufficient for autumn ploughing and sowing.

Luxemburg.—The yield per acre of potatoes of the 1920 crop is estimated at 163·57 bushels.

Austria.—On September 1 the condition of field crops was reported as follows: Wheat 2·4, rye 2·7, barley 2·6, oats 2·3, corn 2·2, potatoes 2·7, sugar beets, 1·8, flax 2·4. (Scale 1 = very good, 2 = good, 3 = average).

Germany.—The results of the potato harvest vary greatly in different districts. In some places potatoes have been injured by recent rainfall and by insect attacks. The condition both on September 1 and October 1, 1920, was 2·8, whilst on October 1, 1919, it was 3·1. The condition of sugar beet was 2·8 on September 1 and October 1, 1920. On October 1, 1919, it was 4. (Scale 2 = good, 3 = average, 4 = bad.) In September the weather was favourable for agriculture, the moisture for autumn sowing being duly provided for. The harvest was completed early, and sowing operations took place so soon that at the beginning of October germination was already in progress almost everywhere.

ENGLISH CROP AND LIVE STOCK RETURNS, 1920.

The English Ministry of Agriculture issued, on August 13, 1920, the usual preliminary statement of the areas under field crops and of the numbers of live stock in 1920, as compared with 1919. Table I gives the areas under field crops and Table II the numbers of live stock.

I. Areas of Field Crops in England and Wales, 1919 and 1920.

Field Crops.	1919.	1920.	Difference between 1919 and 1920 Increase (+) Decrease (—)	
	acres	acres	acres	p.c.
Autumn sown wheat.....	2,074,630	1,792,350	—282,280	—13·6
Spring sown wheat.....	146,570	84,650	—61,920	—42·2
All wheat.....	2,221,200	1,877,000	—344,200	—15·5
Barley.....	1,509,720	1,636,770	+127,050	+8·4
Oats.....	2,564,330	2,267,100	—297,230	—11·6
Mixed grains.....	142,660	148,440	+5,780	+4·1

I. Areas of Field Crops in England and Wales, 1919 and 1920.—concluded.

Field Crops.	1919.	1920.	Difference between 1919 and 1920 Increase (+) Decrease (—)	
	acres	acres	acres	p.c.
Rye.....	106,520	96,470	-10,050	-9.4
Beans.....	284,630	257,640	-26,990	-9.5
Peas.....	163,480	165,120	+1,640	+1.0
Buckwheat.....	6,310	4,810	-1,500	-23.8
Potatoes.....	475,380	544,300	+68,920	+14.5
Turnips and swedes.....	983,400	990,820	+7,420	+0.8
Mangolds.....	396,050	385,780	-10,270	-2.6
Cabbage, savoy and kale.....	51,580	62,080	+10,500	+20.4
Kohl-Rabi.....	9,630	11,160	+1,530	+15.9
Rape.....	92,230	100,440	+7,210	+7.7
Vetches or tares.....	76,960	121,720	+44,760	+58.2
Alfalfa.....	38,760	44,490	+5,730	+14.8
Mustard.....	63,280	71,860	+8,580	+13.6
Sugar beet.....	390	3,110	+2,720	+697.4
Flax for fibre.....	18,460	9,740	+4,010	+21.7
Flaxseed.....		12,730		
Hops.....	16,740	20,760	+4,020	+24.0
Small fruit.....	58,700	60,280	+1,580	+2.7
Clover and grass.....	2,258,430	2,448,300	+189,870	+8.4
Permanent grass.....	14,439,080	14,499,230	+60,150	+0.4
Other field crops and bare fallow.....	769,030	679,190	-89,840	-13.2
Totals.....	26,747,950	26,519,340	-228,610	-0.9

The total acreage under crops and grass in England and Wales on June 4 last was about 26,520,000 acres, a net decline on last year of over 228,000 acres. Arable land accounts for 12,020,000 acres and permanent grass for nearly 14,500,000 acres. The chief features of the returns are a reduction in the grain area and an increase in the area of clover and rotation grasses and green crops, together with large reductions in the number of cattle and sheep. In the case of pigs, there has been an increase.

The acreage under wheat, 1,877,000 acres, is 344,000 acres less than in 1919, and only 70,000 acres above that of 1914. Oats are also being grown to a less extent than last year, the decrease being about 300,000 acres; but the total, 2,267,000 acres, is still 340,000 acres greater than in 1914. On the other hand the acreage of barley has been increased by 127,000 acres to 1,637,000 acres, the highest acreage recorded since 1904. Beans occupy 258,000 acres, or nearly 10 p.c. less than last year, but the area under peas has been slightly increased. The total area under cereals and pulse is 6,450,000 acres, or 540,000 acres less than in 1919, but still some 325,000 acres above the average of the ten years 1910-19. Potatoes are being grown on a largely increased area, the total, 544,000 acres, being 70,000 acres greater than last year, and apart from 1918 is the largest on record. There is little change in the root crops.

II. Numbers of Farm Live Stock in England and Wales, 1919 and 1920.

Description.	1919.	1920.	Difference between 1919 and 1920	
			Increase (+)	Decrease (-)
	No.	No.	No.	p.c.
Horses—				
Horses used for agricultural purposes, including mares for breeding.....	814,200	789,060	-25,140	-3.1
Unbroken horses, including stallions—				
One year and above.....	230,830	235,700	+4,870	+2.1
Under one year.....	104,000	97,340	-6,660	-6.4
Others.....	237,790	243,840	+6,050	+2.5
Total horses.....	1,386,820	1,365,940	-20,880	-1.5
Cattle—				
Cows and heifers in-milk.....	1,943,670	1,827,560	-116,110	-6.0
Cows in-calf, but not in-milk.....	292,290	242,890	-49,400	-16.9
Heifers in-calf.....	317,530	282,400	-35,130	-11.1
Other cattle—				
Two years and above.....	1,167,080	1,178,160	+11,080	+0.9
One year and under two.....	1,271,390	1,108,840	-162,550	-12.8
Under one year.....	1,202,580	907,050	-295,530	-24.6
Total cattle.....	6,194,540	5,546,900	-647,640	-10.5
Sheep—				
Ewes kept for breeding.....	5,764,300	5,107,940	-656,360	-11.4
Other sheep—				
One year and above.....	3,568,040	3,009,850	-558,190	-15.6
Under one year.....	5,791,970	5,261,180	-530,790	-9.2
Total sheep.....	15,124,310	13,378,970	-1,745,340	-11.5
Swine—				
Sows kept for breeding.....	250,750	289,500	+38,750	+15.5
Other pigs.....	1,547,720	1,705,240	+157,520	+10.2
Total swine.....	1,798,470	1,994,740	+196,270	+10.9

Horses used for agricultural purposes were reduced by 25,000, and there was some falling off in the number of foals, which were 7,000 less than in 1919. A serious decline is shown in the total number of cattle, the figures being only 5,547,000, against 6,194,000 in 1919, a reduction of more than 10 p.c., and the smallest number recorded since 1903. The decline is most pronounced in young cattle under one year old, the reduction in this class being nearly 300,000, or 25 p.c. The number of young cattle was exceptionally high during the war, but the serious reduction which has now taken place makes the number on farms on June 4 less than in any year since 1893, when the numbers of this class were first distinguished. The number of cattle from one to two years old is also much less than last year, the reduction in this case being 160,000, or nearly 13 p.c. Cattle above two years old are slightly more numerous, while cows and heifers (in-milk or in-calf), though reduced by about

200,000 to 2,350,000, are 90,000 greater than in 1913, so that there is ample breeding stock from which to replenish the herds of the country. Sheep have been largely reduced, and the total now stands at only 13,380,000, or 1,750,000 less than a year earlier. This is by far the smallest total ever recorded, and is 5,340,000, or 29 p.c. below the average of the 10 years immediately before the war. All classes of sheep shared in the decline, the heaviest relative reduction being in those one year old and above. Pigs on the other hand are being kept in larger numbers than in the last three years, the total, 1,995,000, being the highest since 1916. Sows kept for breeding increased to a relatively greater extent than other pigs, the addition being nearly 40,000, or about 15 p.c., so that the prospects of a further increase in the number of pigs appear to be good.

AGRICULTURAL RETURNS OF SCOTLAND, 1920.

A preliminary statement, issued by the Board of Agriculture for Scotland on October 13, shows that the total area under crops and grass in Scotland was 4,739,512 acres in 1920, as against 4,751,475 acres in 1919. Wheat, with 54,504 acres, shows a decrease of 25,005, or 31.45 per cent; barley an increase of 30,905 acres, or 17.79 per cent, the acreage being 204,651 as compared with 173,746. Oats have decreased by 81,275 acres, or 7.32 per cent, the acreage for 1920 being 1,029,536. Potatoes have increased by 7,624 acres, or 4.93 per cent, the area for 1920 being 162,220 acres. Turnips and swedes, with an acreage of 424,902, have decreased by 1,549 acres, or 0.36 per cent. The total under permanent grass is 1,363,484 acres, an increase of 20,488 acres, or 1.53 per cent and the area under rotation grasses and clover is 1,432,526, an increase of 29,392 acres, or 2.09 per cent.

The numbers of farm live stock, with the corresponding figures for 1919 in brackets, are as follows: Horses 213,938 (213,331); cattle 1,164,390 (1,229,637); sheep 6,345,809 (6,410,039); swine 128,489 (137,905).

FIELD CROPS AND LIVE STOCK OF IRELAND, 1920.

The following is a preliminary estimate of the areas sown to the principal field crops in Ireland for the year 1920, compared with 1919, as published on October 15 by the Irish Department of Agriculture and Technical Instruction:—

I. Areas under Field Crops in Ireland, 1919 and 1920.

Field Crops.	1919.	1920.	Increase (+) or Decrease (-).	
	acres.	acres.	acres.	p.c.
Wheat.....	69,663	49,700	-19,963	-28.7
Oats.....	1,442,458	1,331,342	-111,116	-7.7
Barley or bere.....	186,625	207,715	+21,090	+11.3
Rye.....	5,222	5,749	+527	+10.1
Beans and peas.....	1,689	1,762	+73	+4.3
Potatoes.....	588,802	584,316	-4,486	-0.8
Turnips.....	273,460	276,744	+3,284	+1.2
Mangolds and beetroot.....	74,839	77,447	+2,608	+3.5
Cabbage.....	26,352	28,409	+2,057	+7.8
Other green crops.....	21,826	20,461	-1,365	-6.3
Flax.....	95,610	127,227	+31,617	+33.1
Fruit.....	19,795	22,112	+2,317	+11.7
Hay.....	2,520,096	2,518,320	-1,776	-0

The numbers of farm live stock are estimated as in Table II.

II. Numbers of Farm Live Stock in Ireland, 1919 and 1920.

Description.	1919.	1920.	Increase (+) or Decrease (-).	
	No.	No.	No.	p.c.
Horses.....	624,501	631,654	+7,153	+1.1
Mules and jennets.....	25,582	27,077	+1,495	+5.8
Asses.....	222,469	226,367	+3,898	+1.8
Cattle.....	5,029,450	5,019,857	-9,613	-0.2
Sheep.....	3,513,345	3,588,892	+75,547	+2.2
Swine.....	977,963	980,078	+2,115	+0.2
Goats and kids.....	233,287	247,187	+13,900	+6.0

The report states that for 1920 it was not found practicable to obtain particulars of crops and live stock for all farms in Ireland, and accordingly the Department confined its efforts to obtaining such information as was sufficient to determine reliable estimates.

MILLING AND BAKING TESTS OF CANADIAN WHEAT, 1920.

In the following statements are found the results of milling and baking tests of average samples of grades of Canadian wheat of the harvest of 1920, as reported by Dr. F. J. Birchard, Chemist, Dominion Grain Research Laboratory of the Department of Trade and Commerce, Winnipeg. The samples tested were furnished by the Chief Grain Inspector.

I. Milling Results by Grades of Wheat, 1920.

Grade.	Weight per bushel.	Moist- ure in wheat.	Protein in wheat.	Flour yield.	Offal.	Scouring and mill- ing loss.	Moist- ure in flour.	Moist- ure in offal.
	lb.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
No. 1 Northern...	65	11.2	14.18	73.5	24.3	2.2	13.54	14.39
No. 2 Northern...	64	11.4	14.92	71.7	25.5	2.8	13.00	14.00
No. 3 Northern...	63	12.4	14.05	71.0	25.3	3.7	12.80	14.00
No. 4.....	61.5	12.2	13.78	70.0	27.0	3.0	12.45	13.16
No. 5.....	60.5	11.2	13.79	68.5	27.7	3.8	12.63	13.70
No. 6.....	60	11.4	13.07	65.4	29.8	4.8	12.04	12.66

II. Baking Results by Grades of Wheat, 1920.

(a) STRAIGHT GRADE FLOUR.

Grade.	Absorp- tion.	Expan- sion.	Volume of loaf.	Colour.	Texture.	General appear- ance.	Ash in flour.	Protein in flour.
	p.c.	c.c.	c.c.				p.c.	p.c.
No. 1 Northern...	61	485	1,800	100	100	100	0.55	13.25
No. 2 Northern...	61	475	1,760	99	99	100	0.56	13.53
No. 3 Northern...	61.5	470	1,740	98	98	99	0.63	13.08
No. 4.....	61	470	1,700	95	95	98	0.67	13.08
No. 5.....	65	450	1,550	88	92	93	0.67	12.60
No. 6.....	67	350	1,360	86	88	88	0.68	12.05

(b) SIXTY PER CENT FLOUR.

No. 1 Northern...	63	420	1,790	100	100	100	0.64	-
No. 2 Northern...	62	420	1,770	98	98	100	0.67	-
No. 3 Northern...	63	430	1,720	99	97	98	0.68	-
No. 4.....	63	425	1,760	96	96	100	0.67	-
No. 5.....	66	415	1,700	88	90	96	0.73	-
No. 6.....	67	375	1,640	86	84	90	0.76	-

The milling results were obtained on a small experimental mill and, while comparable among themselves, cannot be regarded as identical with those which would be obtained commercially. They should, however, bear a direct relation to the commercial results, which would naturally be somewhat higher, due to more efficient equipment.

All yields are calculated on a basis of 13.5 per cent moisture, both for the wheat and the flour.

The tests show that the differences in baking quality between the grades, No. 1, No. 2 and No. 3 Northern are comparatively small. In general, the quality of the flour from all of the grades is poor, as compared with last year's samples. In this connection it is of interest to note that the average protein content of the wheat is considerably lower than that reported in previous years¹.

¹ The percentage protein content of average samples of each of the grades of wheat for the 1919 crop was as follows: No. 1 Nor. 15.0; No. 2 Nor. 13.5; No. 3 Nor. 13.9; No. 4 15.1; No. 5 14.5; No. 6 14.4; and of the straight grade flours milled therefrom—No. 1 Nor. 13.6; No. 2 Nor. 13.0; No. 3 Nor. 13.0; No. 4 14.2; No. 5 14.0; No. 6 13.6.

Two series of baking tests were made,—one on the straight grade flour, and one on a sixty per cent extraction. The results of both tests are in good agreement, but the differences shown are somewhat less pronounced in the second series.

EXPLANATION OF TERMS USED.

Milling Terms.

OFFAL.—Under this term are included bran, shorts or middlings and the feed flour which latter, in each case, amounted to about 2 per cent.

SCOURING AND MILLING LOSS.—It will be understood that in working with such small quantities (about four pounds of wheat) as are necessary in experimental milling, it is very difficult to control the milling loss; but it is believed that the figures above recorded represent the losses with a fair degree of accuracy.

Baking Terms.

ABSORPTION.—This term represents the amount of water required by 100 grams of flour to make a dough of standard consistency.

EXPANSION.—The figures in this column represent the maximum height to which a known weight of each dough will rise.

VOLUME.—The figures under this column represent the volume of the loaves in cubic centimeters.

Colour, Texture and General Appearance.

The differences in these characteristics are denoted by means of an arbitrary scale in which the loaf from No. 1 Northern wheat is taken as standard.

ASH.—The uniformity of the ash content of the samples is taken as an indication that the milling has been carried to the same extent in each case, although it is to be noted that the lower grades invariably give considerably higher ash than the higher.

CULTIVATION OF SWEET CLOVER.

Sweet clover has grown rapidly in popularity in the province of Ontario and in parts of the Prairie Provinces. It is grown to a limited extent in the province of Quebec. Because of high prices of seed during the past few years and reports that are circulated amongst farmers as to the large profits that are derived from seed production, there has been a much larger acreage devoted to sweet clover seed than in former years. An export market for seed of the present season has not yet developed, and quite large quantities of seed are now being offered by farmers. In consequence of the price for No. 1 Canadian Grade, White Blossom Sweet Clover seed is down to about \$5 per bushel on the Toronto clover market, with few transactions being effected because of disinclination on the part of the buyers to make an offer of any kind. A report issued by the Markets Division of the Seed Branch on October 12 stated that sweet clover seed of this year promised a normal yield with an increased acreage, estimated by some at 150 per cent of the normal, the increase being most apparent in the Prairie Provinces and in Ontario.

Mr. A. J. Surratt, Statistician of the U.S. Bureau of Crop Estimates at Grand Forks, writes that the situation in North Dakota is

similar to that of eastern Canada. Owing to the extremely large profits made last season by a few North Dakota farmers, there was a heavy swing to sweet clover with the result that the seed supply is now greater than the demand. About a month ago the farmers in this section organized the Sweet Clover Growers Exchange and set twenty cents per pound as a fair selling price. He had not heard of any sales at that price, and he understood that the seed houses were not offering over 10 cents. Sweet clover is rapidly gaining in popularity as a pasture crop, and the acreage for next season will be close to 75,000 acres, which will give North Dakota the rank of being one of the leading states in the production of sweet clover seed in the United States.

PRICES OF CLOVER AND GRASS SEED IN CANADA, 1920.

By GRANT S. PEART, Chief, Markets Division, Seed Branch, Department of Agriculture, Ottawa.

A survey of clover and grass seed prices in Canada was made during the seed-marketing season, March, April and May, inclusive, 1920. Acting in co-operation with the Seed Branch of the Department of Agriculture, the Dominion Bureau of Statistics collected from its crop correspondents throughout Canada, twice monthly during the season, detailed information respecting the prices of grass and clover seed, including especially the average prices received and the average retail prices paid by farmers for seed of each variety. The returns as received were compiled by the Bureau, and the results communicated to and published immediately by the Seed Branch of the Department of Agriculture. A summary of the information thus obtained is now placed on record in the following tables.

I. Average Prices per bushel paid by farmers for Grade No. 1 seed, by provinces, and the average prices for Canada as compared with the same period last year.

Province.	Clover.	Alsike.	Alfalfa.	Sweet Clover.	W. Rye.	Timothy.	Brome Grass.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Prince Edward Island.....	47 45	38 46	67 50	34 75	—	9 75	—
Nova Scotia...	44 62	40 92	34 07	28 65	—	10 75	—
New Brunswick	44 90	42 35	38 67	25 70	7 60	11 06	5 40
Quebec.....	46 62	42 66	35 91	32 40	5 54	10 32	7 70
Ontario.....	45 16	40 64	39 24	30 02	8 45	10 16	—
Manitoba.....	38 96	36 59	40 03	25 90	5 27	11 17	7 87
Saskatchewan.	40 18	40 40	40 50	26 31	4 57	13 80	4 74
Alberta.....	41 59	40 05	44 04	26 78	6 34	12 30	6 11
British Colum- bia.....	45 51	44 18	38 27	29 81	5 33	12 90	7 19
Canada.....	44 68	41 45	39 00	27 01	5 53	11 36	6 00
Canada, 1919...	32 16	26 36	26 06	19 02	5 80	8 74	5 27

The above table shows a range of prices paid as between certain provinces. For instance, alfalfa seed cost \$67.50 in Prince Edward Island and \$38.27 in British Columbia, probably due to the fact that little alfalfa seed is sown in Prince Edward Island and practically none produced. Further, only hardy strains, such as Grimm's, are satisfactory there, and the seed of such strains is usually much higher in price than the seed of common alfalfa. On the other hand, considerable alfalfa seed is grown in British Columbia where common strains are quite hardy; consequently lower prices obtain. Other influences that might cause a range of prices would be direct availability of seed of local grown stocks; the extent of the demand for a given kind of seed; the price at which the distributor secured stocks: i.e., wholesale prices to the retail trade advanced to almost prohibitive prices during the period of the survey. Also, variations in quality as between lots of seed of the same official grade are usually indicated by corresponding variations in prices.

II. Average prices per bushel paid for No. 2 and No. 3 seed in all Canada.

Grade.	R. Clover.	Alsike.	Alfalfa.	Sweet Clover.	W. Rye.	Timothy.	Brome Grass.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
No. 2.....	42 17	38 34	36 17	24 39	4 37	9 45	5 22
No. 3.....	38 21	32 46	33 67	21 74	3 18	8 21	3 77

Further analysis of returns shows a greater demand by farmers for grade No. 1 seed than for grade No. 2 and grade No. 3 seed. Particularly was this shown in the clovers. A larger percentage of No. 2 timothy was purchased than of No. 1.

III. Range of prices paid at different points in the same province for the same grade of seed.¹

Province.	Red Clover.		Alsike.		Timothy.	
	High.	Low.	High.	Low.	High.	Low.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Prince Edward Island....	57 00	35 00	65 00	27 00	14 00	6 65
Quebec.....	60 00	33 00	60 00	30 00	22 00	6 00
Ontario.....	60 00	26 00	50 00	20 00	20 00	7 00
Alberta.....	43 80	30 00	45 00	30 00	25 00	5 00

¹ Taken from Survey of April 15, 1920.

Where distributors had secured stocks not later than the new year, they were in a position to sell against the advancing market. Also, some distributors were fortunate in having on hand a carry-over from the previous year; consequently they were able to sell below current prices at the time the survey was taken. On the other hand, those distributors who purchased seed for customers as orders were received and when prices had reached the peak were obliged to ask corresponding prices which were "high."

IV. Average prices per bushel paid to farmers for seed, by provinces, and average prices for Canada compared with the same period last year.

Province.	R. Clover.	Alsike.	Alfalfa.	Sweet Clover.	W. Rye.	Timothy.	Brome Grass.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Prince Edward Island.....	43 09	33 49	—	—	—	7 91	—
Nova Scotia.....	41 99	36 73	—	—	—	9 34	—
New Brunswick.....	38 33	33 03	—	25 00	—	9 98	—
Quebec.....	39 80	34 96	39 00	8 10	—	8 79	—
Ontario.....	35 07	30 58	31 90	20 83	—	8 49	—
Manitoba.....	40 50	30 00	37 67	15 00	3 44	9 38	4 07
Saskatchewan.....	—	—	—	19 20	3 57	12 80	3 99
Alberta.....	—	—	24 00	16 00	—	11 61	—
British Columbia.....	42 00	36 00	—	—	—	—	—
Canada.....	40 11	33 54	33 14	17 35	3 50	9 80	4 03
Canada, 1919...	26 41	21 56	22 59	14 11	3 78	7 73	4 28

We must assume that a large proportion of the seed sold by farmers during the period of the survey represented sales directly to other farmers. Furthermore, the seed sold represented the best of the seed crop which was reserved by growers to sell to other farmers in competition with seed dealers. The prices obtained compare favourably with dealers' retail prices paid by farmers and doubtless would have equalled dealers' prices, had they not been averaged with low prices obtained for some low grade seed marketed to wholesalers.

V. Range in prices per bushel paid farmers for seed.¹

Province.	Red Clover.		Alsike.		Timothy.	
	High.	Low.	High.	Low.	High.	Low.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Prince Edward Island....	47 50	28 00	45 00	19 00	14 00	5 50
Quebec.....	52 00	22 80	48 00	13 00	17 75	5 76
Ontario.....	56 00	18 00	45 00	15 00	18 00	2 50
Alberta.....	—	—	—	—	21 00	7 68

¹Taken from Survey of April 15, 1920.

The difference between the highest and lowest prices received by farmers for each of the foregoing classes of seed probably represents the difference between the highest and lowest quality of seed offered by farmers.

TWELVE YEARS AS CROP CORRESPONDENT.

M. A. Duriez, late of Charlotte, Saskatchewan, having rendered twelve years of faithful service as crop correspondent for the Dominion Government, has returned to France, his native country, leaving his sons, after honourable service in the war, to continue farming in

Canada. At a recent meeting of the Société des Agriculteurs du Nord, Lille, France, M. Duriez gave a brief but interesting account of agricultural conditions in Canada. He pointed out that the present price of wheat was from \$2.15 to \$2.30 per bushel, a price which allowed the Canadian farmer to realize a higher profit than the farmer in France, because in Canada labour and farm help were the sole expenses entering into cost, the land being given for almost nothing. He observed that in certain districts drought was sometimes injurious to the crops, and that therefore the Experimental Farms and the Government recommended mixed farming and advised the raising of live stock, the establishment of dairy factories and the raising of poultry, which notwithstanding the abrupt variations of temperature gave excellent returns and continued to make good progress. Having replied to various requests for information on the part of those present; he concluded by a word of praise for Canadian farmers, whose persevering labours have changed uncultivated land into fertile soil yielding large recompense. M. Duriez was one of the original crop correspondents appointed when the Dominion Crop Reporting Service was established in 1908, and we are glad to state that his son, M. Alfred Duriez, has succeeded his father as crop correspondent for the Dominion Bureau of Statistics.

THE WEATHER DURING OCTOBER.

The Dominion Meteorological Office reports that the temperature was from average to 3° below in British Columbia and in western Alberta; elsewhere in the Dominion it was above the average. The positive departures ranged from 4 to 8 in Ontario, from 3 to 5 in the Maritime Provinces and from 2 to 5 in Saskatchewan and Manitoba. The precipitation was much above the usual quantity in British Columbia; it was also above in Alberta and Saskatchewan. In Manitoba it was above in some districts while in others there was very little. In Ontario it did not attain to the average amount except locally, the excess being chiefly confined to places situated in the Peninsula. In Quebec some districts recorded less than the normal amount, while in others the average was exceeded. In the Maritime Provinces, except locally in northern New Brunswick, there was very little precipitation.

PRICES OF AGRICULTURAL PRODUCE.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

Source: Board of Grain Commissioners for Canada.

Grain and Grade.	Oct. 2.		Oct. 9.		Oct. 16.		Oct. 23.		Oct. 30.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—										
No. 1 Nor.....	2 38	—2 58	2 17½	—2 26½	2 34½	—2 45	2 29½	—2 36½	2 27	—2 35½
No. 2 Nor.....	2 35	—2 53½	2 15½	—2 23½	2 31½	—2 44	2 27½	—2 36	2 25	—2 33½
No. 3 Nor.....	2 27	—2 48½	2 06½	—2 15½	2 23½	—2 34½	2 21½	—2 27½	2 20	—2 28½
No. 4.....	2 20	—2 37½	2 00½	—2 08½	2 16½	—2 28½	2 11½	—2 21½	2 12	—2 20½
No. 5.....	2 10	—2 27½	1 90½	—1 98½	2 06½	—2 18½	2 01½	—2 11½	2 05½	—2 09½
No. 6.....	—	—	1 88½	—	1 97½	—2 08½	1 91½	—2 01½	1 94½	—1 98½
Feed.....	—	—	1 78½	—	1 87½	—1 98½	1 81½	—1 91½	—	—
Oats—										
No. 2 C.W.....	0 71	—0 75½	0 69½	—0 74½	0 71½	—0 76½	0 72	—0 73½	0 69	—0 71½
No. 3 C.W.....	0 68	—0 71½	0 66½	—0 69½	0 65½	—0 70½	0 65½	—0 67	0 64	—0 65
No. 1 feed ex.....	0 67	—0 71	0 65½	—0 68½	0 65½	—0 69½	0 65½	—0 67½	0 63	—0 65
No. 1 feed.....	0 65	—0 69	0 63½	—0 68½	0 65½	—0 69½	0 63½	—0 66½	0 61	—0 63
No. 2 feed.....	0 63	—0 67½	0 61½	—0 64½	0 60½	—0 65½	0 60½	—0 62½	0 58	—0 60
Barley—										
No. 3 C.W.....	1 09	—1 13½	1 05½	—1 08½	1 11½	—1 22	1 13½	—1 20	1 17	—1 22
No. 4 C.W.....	1 03	—1 08	1 00½	—1 03	1 06	—1 18	1 08	—1 16	1 11	—1 17
Rejected.....	0 94	—0 98	0 89½	—0 93½	0 93	—0 95	0 84½	—0 86	0 83½	—0 87½
Feed.....	0 92	—0 96	0 87½	—0 91½	0 91	—0 95	0 84½	—0 86	0 83½	—0 87½
Flax—										
No. 1 N.W.C.....	3 17	—3 30	2 90	—3 10	3 02	—3 10	2 78½	—2 97	2 76	—2 85½
No. 2 C.W.....	3 13	—3 24	2 86	—3 06	2 98	—3 06	2 74½	—2 93	2 72	—2 81½
No. 3 C.W.....	2 77	—2 85	2 50	—2 70	2 62	—2 70	2 38½	—2 57	2 36	—2 45½
Rye—										
No. 2 C.W.....	1 75½	—1 79½	1 71	—1 76	1 77	—1 88	1 83½	—1 86	1 84½	—2 01

II.—Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1920.

(Source: Monthly Crop Report of the U.S. Department of Agriculture.)

Grain and Market.	July.		August.		September.		October.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red, Winter, No. 2—								
St. Louis.....	2 24	—2 91	2 22	—2 62	2 35	—2 68	2 10	—2 39
Chicago.....	2 29	—2 85	2 22	—2 62½	—	—	—	—
New York (f.o.b.) afloat.....	2 58	—3 25	2 50	—2 89	2 53	—2 94	2 15½	—2 52
Corn, No. 2, mixed—								
St. Louis.....	1 49	—1 78	1 44	—1 73	1 03	—1 51	—	—
Corn No. 2—								
Chicago.....	1 40	—1 83½	1 40	—1 49	—	—	0 81½	—1 10
Oats, No. 2—								
St. Louis.....	0 70	—1 12½	0 69	—0 70	0 55	—0 72	—	—
Chicago.....	0 72	—1 06	0 68	—0 88½	—	—	0 52½	—0 57½
Rye, No. 2—								
Chicago.....	1 71	—2 35½	1 70	—2 10	—	—	1 60	—1 77½

III. Prices of Imported Grain and Flour at British Markets, 1920.

Source: For Mark Lane, London, "The Mark Lane Express"; for Liverpool, "Broomhall's Corn Trade News."

Mark Lane.	Oct. 4.		Oct. 11.		Oct. 18.		Oct. 25.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
Canadian No. 1.....	2 85½	—	2 85½	—	—	—	3 60½	3 62
Canadian No. 2.....	2 82½	—	2 82½	—	—	—	3 51½	3 53½
Canadian No. 3.....	2 76½	—	2 76½	—	—	—	3 40	3 44½
Canadian No. 4.....	2 73½	—	2 73½	—	—	—	3 37	33 8½
American spring.....	2 82½	—	2 82½	—	—	—	3 50½	3 62
American hard winter.....	2 85½	—	2 85½	—	—	—	3 56½	3 62
American red No. 2.....	2 79½	—	2 79½	—	—	—	3 51½	3 53½
Australian.....	3 03	—	3 03	—	—	—	3 84½	3 85½
Argentine.....	2 91½	—	2 91½	—	—	—	3 42½	3 43½
Oats—								
Canadian.....	1 62½—1 65½		1 62½—1 65½		—	—	1 57½—1 60½	
American.....	1 57½—1 60½		1 57½—1 60½		—	—	1 55½—1 57½	
Chilian.....	1 70½—1 75½		1 70½—1 75½		—	—	1 62½—1 65½	
Flour—								
Canadian spring.....	21 41	—	22 63	—	22 63	—	22 63	—
American spring.....	21 41	—	22 63	—	22 63	—	22 63	—
American winter.....	21 41	—	22 63	—	22 63	—	22 63	—
Australian.....	21 41	—	21 60	—	21 60	—	21 60	—

Liverpool.	Oct. 5-12.	Liverpool.	Oct. 5-12.
	\$ c.		\$ c.
Wheat—		Wheat—	
Nor. Man. No. 1.....	3 01½	Red winter No. 2.....	2 95½
Nor. Man. No. 2.....	2 98½	Hard winter No. 2.....	2 98½
Nor. Man. No. 3.....	2 95½	Australian.....	3 04½

October 19 and 26: no quotations.

IV.—Average Prices of British-grown Grain, 1920.

Source: "London Gazette", as published pursuant to s. 8 of the Corn Returns Act, 1882.

Week ended	Wheat.		Barley.		Oats.	
	per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
	s. d.	\$	s. d.	\$	s. d.	\$
October 2.....	90 7	2.755	82 6	2.409	55 11	1.482
" 9.....	90 7	2.755	86 0	2.511	56 0	1.484
" 16.....	90 8	2.758	89 6	2.613	55 6	1.471
" 23.....	90 8	2.758	90 11	2.632	54 9	1.451
" 30.....	90 6	2.753	92 9	2.708	54 4	1.440
Average.....	90 7	2.756	88 4	2.575	55 4	1.466

V.—Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1920.
 SOURCE: For Montreal, Trade Bulletin; for Toronto, Dealers' quotations; for Winnipeg, and U.S. Cities, "The Northwestern Miller," Minneapolis.

Month.	Montreal.				Toronto.			
	Flour Manitoba Standard grade.	Flour Ontario del'd at Montreal.	Bran.	Shorts.	Standard Flour (Jute bags).	Standard Flour (Cotton bags.)	Bran.	Shorts.
	Per bl. \$	Per bl. cts \$	Per ton. \$	Per ton. cts \$	Per bl. \$	Per bl. cts \$	Per ton. \$	Per ton. cts \$
1920.								
January.....	13 34	9 75.	44 70	52 25	13 25	13 40	45 25	52 25
February.....	13 40	10 90	45 25	52 25	13 25	13 45	45 25	52 25
March.....	13 40	10 76	45 25	52 25	13 25	13 45	45 25	52 25
April.....	13 47	10 76	48 87	55 87	13 40	13 60	51 25	58 25
May.....	14 55	11 38	53 50	60 50	14 85	15 05	54 25	61 25
June.....	14 95	13 25	54 25	61 25	14 85	15 05	54 25	61 25
July.....	14 92	Nominal	54 25	61 25	14 85	15 05	54 25	61 25
August.....	14 95	Nominal	54 25	61 25	14 85	15 05	54 25	61 25
September.....	14 21	Nominal	54 50	59 44	14 25	14 55	54 25	59 75
October.....	12 90	Nominal	44 85	49 85	13 00	13 30	40 25	45 25

Month.	Winnipeg.				Minneapolis.				Duluth.	
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.	Shorts.		
	Per bl. \$	Per ton. cts \$	Per ton. \$	Per bl. \$	Per ton. cts \$	Per ton. \$	Per bl. \$	Per ton. cts \$		
1920.										
January.....	12 65	39 00	46 00	14 53	41 58½	42 70	44 37	45 10		
February.....	12 65	39 00	46 00	13 41	42 50	43 37½	47 83	48 50		
March.....	12 65	39 00	46 00	13 37½	42 50	43 37½	48 25	51 50		
April.....	12 76½	43 50	50 50	14 55	49 66	50 50	54 00	54 87½		
May.....	13 64	46 80	53 80	15 28	53 00	53 40	57 25	57 60		
June.....	14 30	48 00	55 00	14 02	53 00	53 40	57 25	57 60		
July.....	14 30	48 00	55 00	13 68	53 00	53 40	57 25	57 60		
August.....	14 30	48 00	54 00	12 32	53 00	53 40	57 25	57 60		
September.....	13 20	48 00	53 00	12 70	37 33½	38 25	45 00	47 25		
October.....	12 34	45 00	50 00	10 90	29 88	31 38	33 75	35 11		

NOTE.—The ton = 2,000 lb. and the barrel = 196 lb.

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920.

Source: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	May.	June.	July.	Aug.	Sept.	Oct.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Montreal—						
Steers, heavy finished.....	—	15-75	—	—	—	—
Steers, 1,000-1,200 lb., good.....	15-25	15-9125	14-50	11-82	11-72	10-22
Steers, 1,000-1,200 lb., common.....	—	—	12-00	11-27	—	—
Steers, 700-1,000 lb., good.....	14-20	14-6875	13-65	11-00	11-00	9-73
Steers, 700-1,000 lb., common.....	12-00	12-8125	10-95	9-00	8-57	7-20
Heifers, good.....	13-50	14-0625	12-70	70-25	10-41	9-15
Heifers, fair.....	11-25	11-75	10-40	8-67	8-48	7-30
Heifers, common.....	9-65	9-125	7-70	7-22	7-43	6-28
Cows, good.....	11-65	11-8125	10-65	9-28	8-94	7-86
Cows, common.....	9-00	9-25	7-75	6-73	6-83	5-93
Bulls, good.....	11-10	11-625	10-583	9-26	8-25	—
Bulls, common.....	9-25	9-50	6-70	5-88	5-65	5-19
Canners and Cutters.....	6-35	6-3125	4-75	4-24	4-00	3-75
Oxen.....	11-25	12-50	10-00	—	11-50	—
Calves, veal.....	12-10	12-5625	10-20	11-98	13-76	13-51
Calves, grass.....	—	8-25	7-25	6-46	6-76	5-87
Stockers, 450-800 lb., good.....	—	—	—	—	—	—
Stockers, 450-800 lb., fair.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., good.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), select.....	21-00	20-4375	21-04	20-77	—	19-54
Hogs (fed and watered), heavies.....	20-50	19-516	18-875	18-41	—	—
Hogs (fed and watered), lights.....	20-80	—	18-90	—	—	—
Hogs (fed and watered), sows.....	16-90	16-337	16-87	16-30	16-09	15-64
Hogs (fed and watered), stags.....	—	—	13-90	—	—	—
Lambs, good.....	—	18-1666	14-90	12-71	12-60	17-15
Lambs, common.....	—	—	13-125	10-66	11-21	10-53
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	12-25	10-925	8-62	7-16	6-90	6-50
Sheep, common.....	11-50	9-50	7-45	6-68	6-30	5-41
Toronto—						
Steers, heavy, finished.....	15-15	15-195	15-55	14-04	—	13-35
Steers, 1,000-1,200 lb., good.....	14-47	14-85	14-65	12-91	12-41	10-78
Steers, 1,000-1,200 lb., common.....	12-85	12-64	12-50	10-75	8-63	8-25
Steers, 700-1,000 lb., good.....	13-85	14-84	14-20	11-43	10-82	9-77
Steers, 700-1,000 lb., common.....	11-71	11-8225	11-85	10-37	8-79	7-89
Heifers, good.....	13-83	14-60	14-05	12-83	17-03	10-50
Heifers, fair.....	12-07	13-142	12-15	10-61	8-93	7-50
Heifers, common.....	10-23	10-775	9-75	8-64	7-44	6-50
Cows, good.....	11-56	12-8125	11-90	10-29	10-32	9-45
Cows, common.....	9-66	11-0825	9-75	8-06	7-33	6-44
Bulls, good.....	11-69	12-172	11-20	8-90	9-90	8-50
Bulls, common.....	9-64	10-112	8-70	6-91	7-16	6-00
Canners and Cutters.....	6-09	5-855	4-90	4-33	4-63	5-00
Oxen.....	—	—	—	—	—	—
Calves, veal.....	15-43	15-58	16-85	17-50	17-98	17-71
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	11-32	11-557	9-85	9-00	9-00	8-50
Stockers, 450-800 lb., fair.....	1-67	10-15	8-60	8-00	8-00	8-00
Feeders, 800-1,000 lb., good.....	12-55	12-912	11-65	11-63	11-07	10-50
Feeders, 800-1,000 lb., fair.....	11-81	11-082	10-125	9-64	9-60	—
Hogs (fed and watered), select.....	20-23	19-59	20-60	20-39	20-60	19-71
Hogs (fed and watered), heavies.....	19-14	18-617	19-6875	19-57	19-78	19-22
Hogs (fed and watered), lights.....	18-14	17-7533	18-60	18-18	18-85	17-99
Hogs (fed and watered), sows.....	16-25	15-425	16-80	16-33	10-86	15-81
Hogs (fed and watered), stags.....	14-22	14-25	—	—	—	—
Lambs, good.....	16-77	19-1675	17-25	14-87	13-70	12-70
Lambs, common.....	15-01	17-385	15-10	10-77	9-46	9-89
Sheep, heavy.....	—	—	—	9-50	10-00*	8-69*
Sheep, light.....	14-09	12-18	10-45	8-46	7-79	7-06
Sheep, common.....	7-68	7-535	7-45	6-32	4-83	4-43
Winnipeg—						
Steers, heavy, finished.....	15-01	15-227	12-30	11-19	10-83	8-53
Steers, 1,000-1,200 lb., good.....	14-10	14-495	11-746	10-57	10-49	8-88
Steers, 1,000-1,200 lb., common.....	9-50	10-00	8-96	7-81	7-60	6-42
Steers, 700-1,000 lb., good.....	13-35	13-3975	10-70	9-27	9-34	8-01
Steers, 700-1,000 lb., common.....	—	9-00	7-708	6-68	6-68	5-87
Heifers, good.....	13-40	13-3825	10-88	9-77	9-51	7-56

* Yearlings.

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	May.	June.	July.	Aug.	Sept.	Oct.
Winnipeg—con.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Heifers, fair.....	10-26	10-29	8-488	7-60	7-34	6-07
Heifers, common.....	8-00	7-56	6-148	5-50	5-61	4-06
Cows good.....	11-43	11-445	9-484	8-60	8-41	6-77
Cows, common.....	8-68	8-6875	7-026	6-20	6-22	5-21
Bulls, good.....	9-42	9-282	6-696	6-22	6-03	5-79
Bulls common.....	6-90	6-778	5-443	5-11	5-18	4-30
Canners and Cutters.....	4-41	4-3725	3-886	3-60	3-91	3-59
Oxen.....	—	8-25	7-128	6-44	6-75	5-35
Calves, veal.....	13-21	11-5475	10-572	9-07	8-87	7-22
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8-63	8-91	7-418	6-31	6-33	5-94
Stockers, 450-800 lb., fair.....	7-91	7-145	6-012	5-12	5-19	4-88
Feeders, 800-1,100 lb., good.....	11-94	10-365	9-546	8-55	8-65	8-02
Feeders, 800-1,100 lb., fair.....	9-80	8-852	7-534	6-57	6-74	6-12
Hogs (fed and watered), selects.....	21-61	19-395	18-50	19-73	21-08	18-69
Hogs (fed and watered), heavies.....	19-65	17-252	16-492	17-23	18-38	16-24
Hogs (fed and watered), lights.....	19-56	17-1125	16-674	17-94	20-35	16-57
Hogs (fed and watered), sows.....	17-92	15-367	14-504	15-25	15-88	13-45
Hogs (fed and watered), stags.....	15-32	13-245	17-492	12-16	12-43	11-91
Lambs, good.....	15-65	15-995	17-974	12-53	11-61	9-53
Lambs, common.....	—	—	8-25	7-50	8-12	6-63
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	12-20	12-6075	9-658	7-77	7-56	6-22
Sheep, common.....	8-00	7-88	6-476	4-87	5-27	4-53
Calgary—						
Steers, heavy, finished.....	14-63	14-083	11-00	9-85	10-78	7-97
Steers, 1,000-1,200 lb., good.....	13-72	13-00	10-30	9-64	9-55	7-30
Steers, 1,000-1,200 lb., common.....	10-76	12-85	—	7-22	7-46	6-59
Steers, 700-1,000 lb., good.....	13-30	12-8333	—	8-68	8-02	6-66
Steers, 700-1,000 lb., common.....	10-35	—	—	7-19	7-09	5-79
Heifers, good.....	13-50	13-25	8-25	7-86	7-78	6-19
Heifers, fair.....	—	—	—	7-42	6-78	5-50
Heifers, common.....	—	—	—	6-25	6-69	5-00
Cows, good.....	13-06	12-0625	8-96	7-53	7-94	6-32
Cows, common.....	9-57	8-35	7-138	6-31	5-36	5-00
Bulls, good.....	9-50	—	—	5-43	5-93	5-19
Bulls, common.....	—	5-50	5-00	—	5-06	4-50
Canners and Cutters.....	—	—	—	3-88	4-00	3-75
Oxen.....	—	—	—	—	6-75	—
Calves, veal.....	11-95	13-50	11-716	9-62	10-19	8-92
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	9-09	9-187	8-33	7-68	7-43	6-13
Stockers, 450-800 lb., fair.....	8-60	8-037	7-61	6-60	6-40	5-43
Feeders, 800-1,100 lb., good.....	10-48	10-525	9-85	9-06	8-61	7-24
Feeders, 800-1,100 lb., fair.....	—	9-50	9-05	8-10	7-94	16-71
Hogs (fed and watered), select.....	21-52	19-525	17-90	19-34	22-50	20-89
Hogs (fed and watered), heavies.....	—	19-25	16-85	18-09	20-75	18-25
Hogs (fed and watered), lights.....	20-39	19-1725	17-30	17-78	18-81	17-70
Hogs (fed and watered), sows.....	18-40	16-275	14-90	18-27	16-89	18-98
Hogs (fed and watered), stags.....	—	—	12-25	13-15	—	—
Lambs, good.....	9-00	—	13-375	11-02	10-46	10-60
Lambs, common.....	—	—	11-00	8-77	9-00	8-00
Sheep heavy.....	—	—	8-50	—	—	—
Sheep, light.....	14-60	13-50	9-083	9-72	7-39	7-25
Sheep, common.....	—	—	—	7-00	6-50	6-50
Edmonton—						
Steers, heavy, finished.....	14-24	—	—	9-25	9-00	8-25
Steers, 1,000-1,200 lb., good.....	14-08	12-8125	10-50	8-80	8-46	7-42
Steers, 1,000-1,200 lb., common.....	11-43	11-125	9-4375	7-16	6-65	5-41
Steers, 700-1,000 lb., good.....	12-00	11-75	9-50	7-68	7-54	6-94
Steers, 700-1,000 lb., common.....	10-68	10-1666	8-875	6-18	5-88	4-50
Heifers, good.....	12-10	12-25	9-417	7-30	7-40	6-16
Heifers, fair.....	11-03	10-4	8-8125	6-42	6-41	5-55
Heifers common.....	10-00	9-375	7-90	5-22	6-81	4-50
Cows, good.....	12-48	11-50	8-85	7-23	6-94	6-43
Cows, common.....	9-76	9-1666	7-00	5-48	5-00	4-92
Bulls, good.....	9-00	7-833	6-00	5-30	5-00	5-00
Bulls, common.....	7-25	7-125	4-75	4-28	4-25	4-25
Canners and Cutters.....	5-50	—	—	—	—	3-20

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	May.	June.	July.	Aug.	Sept.	Oct.
Edmonton—con.						
Oxen.....	—	—	—	—	—	—
Calves, veal.....	14.47	14.00	10.60	9.23	8.99	8.42
Calves grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	9.28	8.375	7.50	6.56	6.58	5.33
Stockers, 450-800 lb., fair.....	8.45	7.437	6.40	5.31	5.50	5.16
Feeders, 800-1,000 lb., good.....	10.93	10.375	9.15	—	—	—
Feeders, 800-1,000 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	21.20	19.3125	17.85	19.21	21.89	20.80
Hogs (fed and watered), heavies.....	20.25	18.312	16.813	17.82	19.16	17.45
Hogs (fed and watered), lights.....	18.15	17.0625	15.813	17.25	17.89	17.16
Hogs (fed and watered), sows.....	18.20	17.062	15.85	16.93	18.09	18.27
Hogs (fed and watered), stags.....	17.27	15.375	14.00	—	—	—
Lambs, good.....	—	—	13.00	9.07	10.28	9.05
Lambs, common.....	—	10.00	10.75	7.40	8.34	7.00
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	—	13.00	10.00	7.63	8.20	7.77
Sheep, common.....	—	—	8.25	5.48	5.30	6.00

VII. Average Prices of Milk in Principal Canadian Cities, 1919-20.

SOURCE: Dealers' Quotations.

Description.	Halifax, N.S.	Montreal, P.Q.	Toronto, Ont.	Winnipeg, Man.	Vancouver B.C.
Price Paid to Producers.	Cents per gallon.	Cents per gallon.	Per 8 gall. can.	Per cwt. ¹	Per lb. butter fat.
Winter..... 1919	40	35	\$ c. \$ c. 2 80	\$ c. 2 95	\$ c. 1 10
Spring and Summer..... 1919	40	30	2 25-2 55	2 95	1 00
Fall and Winter..... 1919-20	40	40	3 10	3 40	1 10
Spring and Summer..... 1920	40	31	2 35-2 70	Per 10 gals. ² 3.502	1 10
³ Fall and Winter..... 1920-21	—	—	3 25	—	—
Wholesale Price to Hotels, Stores, etc.—	Cents per quart in cans. Cents per quart in cans.	Cents per quart.	Cents per gallon.	Cents per gallon.	Cents per gallon.
Winter..... 1919	13½ 14.	—	44	45	45-50
Spring and Summer..... 1919	13½ 14.	—	40	45	45-50
Fall and Winter..... 1919-20	13½ 14.	—	48	49	45-50
Spring and Summer..... 1920	13½ 14.	—	43-44	48	45-50
³ Fall and Winter..... 1920-21	— —	—	53-55	—	45-50
Retail Price per single Quart Cash—	Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.
Winter..... 1919	15	14	15	13	15
Spring and Summer..... 1919	15	13	14	13	15
Fall and Winter..... 1919-20	15	16	16	15	15
Spring and Summer..... 1920	15	14-16	15	15	15
³ Fall and Winter..... 1920-21	—	—	17	—	—

¹Testing 3.6 p.c.²103 lb.³Preliminary.

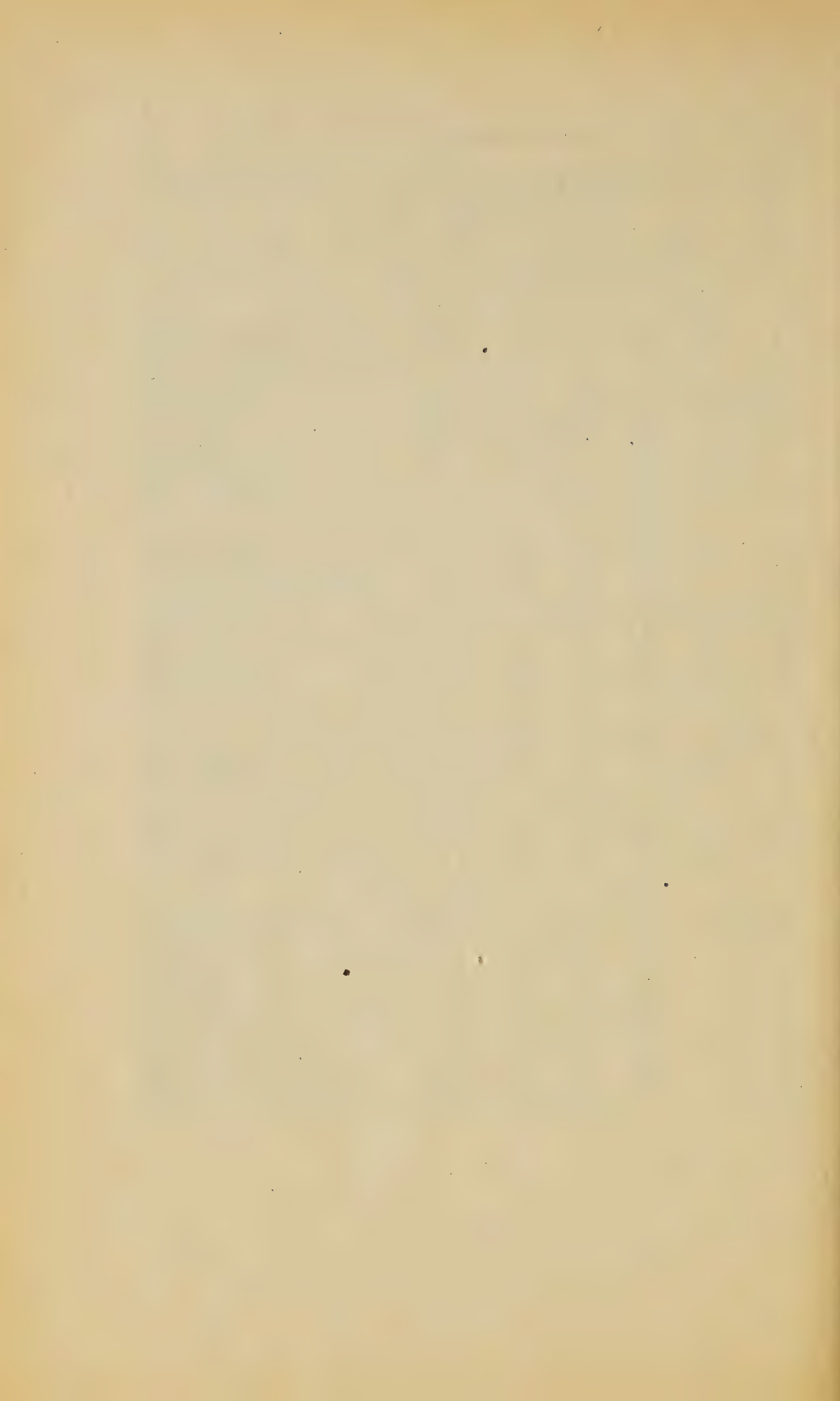
VIII. Average Prices of Live Stock at Chicago, U.S.A., 1920.—Source: Market Reporter, U.S. Department of Agriculture.

Date	Hogs.			Cattle.				Sheep.		
	Bulk of Sales.		Light.	Beef Steers (choice and prime.)		Heifers.	Veal Calves.	Calves.	Lambs.	Wethers.
	¢.	¢.		Medium Heavy.	Light Weight.					
1920.	¢.	¢.	¢.	¢.	¢.	¢.	¢.	¢.	¢.	¢.
Feb. 8.	15 00-15 30	15 00-15 30	15 00-15 40	15 00-17 15	14 10-16 65	6 65-13 25	17 50-19 00	9 50-11 00	17 25-20 00	15 00-18 50
" 11.	14 40-15 10	14 30-15 00	14 40-15 20	14 75-16 85	13 75-16 50	6 50-12 50	16 75-17 50	9 50-11 00	18 50-21 00	15 50-19 00
" 17.	14 00-14 65	14 00-14 90	14 00-14 85	14 75-16 85	14 00-16 50	6 40-13 00	15 75-17 25	9 50-11 00	18 00-21 25	15 00-19 00
Mar. 3.	13 75-14 25	13 85-14 35	14 15-14 50	13 75-16 85	12 85-15 60	6 50-12 50	15 00-16 50	9 50-11 00	17 50-20 65	15 00-18 75
" 6.	14 40-15 25	14 70-15 25	15 00-15 40	14 25-16 00	13 40-15 60	6 75-13 25	15 00-16 50	9 50-11 00	17 50-20 30	15 25-18 50
" 18.	14 10-15 40	14 75-15 80	15 00-15 65	14 00-15 40	14 00-15 75	7 35-13 75	16 25-17 25	9 50-11 00	17 25-20 00	15 00-18 00
" 23.	14 60-16 15	15 15-16 30	15 30-15 85	13 50-13 50	13 40-15 40	7 00-13 25	16 25-17 25	9 50-11 00	17 00-19 35	15 00-17 75
April 6.	15 25-16 25	15 65-16 80	16 00-16 50	13 50-15 25	13 50-15 25	7 40-13 00	17 50-19 00	9 75-11 50	17 25-20 00	15 00-17 75
" 13.	15 25-16 25	15 65-16 80	16 00-16 50	14 00-15 50	14 00-15 50	8 00-14 00	16 00-17 50	9 50-11 25	18 00-20 75	15 50-17 50
" 20.	14 85-16 25	15 30-16 50	15 15-15 60	13 15-15 00	14 25-15 50	7 85-14 25	12 50-14 00	9 50-11 25	18 00-20 75	15 50-18 50
" 27.	13 65-15 15	14 15-15 35	14 75-15 35	13 00-14 25	13 00-14 50	7 15-13 75	14 00-16 00	9 50-11 25	17 50-19 00	14 00-16 75
May 4.	13 90-15 10	14 35-15 15	14 75-15 35	13 00-14 25	13 25-14 50	7 75-13 75	12 00-14 00	9 25-11 00	16 50-18 40	13 75-16 50
" 11.	13 35-14 25	13 75-14 45	14 00-14 50	12 85-13 85	13 25-14 35	8 00-13 50	10 50-12 75	9 25-11 00	15 25-17 50	13 50-16 75
" 18.	13 85-14 75	14 25-14 80	14 40-14 80	12 50-13 65	13 00-13 90	9 00-13 50	10 00-13 00	9 00-10 50	17 00-19 25	12 50-15 25
" 25.	13 85-14 75	14 25-14 80	14 40-14 80	12 50-13 65	13 00-13 90	7 75-13 50	11 00-13 75	9 00-10 50	15 00-17 00	11 75-14 75
June 1.	13 85-14 80	14 00-14 90	14 00-14 60	13 15-14 25	13 75-14 90	7 75-13 00	12 25-15 00	9 00-10 50	14 50-17 00	11 75-14 75
" 8.	13 60-14 40	14 00-14 55	14 00-14 60	15 15-16 25	15 00-16 00	8 50-14 25	13 25-15 00	9 00-10 75	14 00-17 00	9 50-13 00
" 15.	14 20-15 15	14 85-15 25	14 75-15 30	16 25-17 00	16 00-17 00	8 00-14 50	13 50-15 25	9 00-10 75	14 25-17 00	10 00-15 00
" 22.	14 80-16 35	15 60-16 80	15 40-16 00	16 25-17 10	16 25-17 10	7 00-14 25	13 00-14 75	9 00-10 75	13 50-17 00	10 50-14 50
" 29.	14 40-15 95	15 00-16 50	15 00-15 50	16 25-17 10	16 25-17 10	7 00-15 00	12 75-13 75	9 00-10 75	14 00-17 50	11 50-15 75
July 6.	13 70-15 15	15 00-15 85	14 75-15 85	16 10-16 85	16 00-16 85	6 50-14 50	10 75-12 25	8 50-10 00	13 50-16 75	8 50-12 50
" 13.	13 75-16 00	15 35-16 15	15 10-16 15	16 75-17 25	16 40-17 25	6 50-11 75	12 25-14 00	8 50-10 00	11 50-15 00	9 50-13 50
" 20.	14 50-16 50	15 90-16 90	15 50-16 65	16 10-17 00	16 25-17 15	6 50-14 90	13 00-15 50	8 50-10 00	13 50-16 75	9 50-13 50
" 27.	13 50-15 80	14 50-15 55	14 75-15 60	16 00-16 85	16 00-17 00	6 50-14 90	13 00-15 50	8 50-10 00	13 00-16 25	10 00-14 00
Aug. 3.	13 50-16 00	14 60-16 00	15 10-16 10	16 25-17 25	16 00-17 25	6 00-14 75	15 00-17 25	8 50-10 00	12 50-16 25	9 00-13 00
" 10.	14 00-16 00	15 00-16 00	15 20-16 10	16 25-17 50	16 75-17 50	6 00-14 90	15 00-16 50	8 50-10 00	12 00-15 10	9 00-13 00
" 17.	13 40-16 00	15 25-16 00	15 40-16 00	16 25-17 50	16 25-17 50	6 00-15 00	14 50-15 50	8 50-10 00	11 75-14 35	8 50-12 00
" 24.	14 75-16 45	15 40-15 50	14 75-15 60	16 50-17 50	16 25-17 50	6 00-15 00	14 50-15 50	8 50-10 00	10 50-13 10	8 00-9 75
Sept. 1.	14 75-16 00	15 25-16 10	15 50-16 10	16 50-17 50	16 25-17 50	6 00-15 00	14 50-15 50	8 50-10 00	11 25-14 00	8 50-10 00
" 8.	14 30-16 00	15 25-16 10	15 50-16 10	16 50-17 50	16 50-17 75	6 50-15 00	15 00-17 75	8 50-10 00	12 00-14 50	8 75-10 75
" 15.	15 70-17 25	16 00-17 30	16 70-17 30	17 00-18 00	16 75-18 00	6 50-15 00	15 00-17 75	8 50-10 00	12 00-14 50	8 75-10 75
" 22.	15 70-17 25	16 00-17 30	16 70-17 30	17 00-18 00	16 75-18 00	6 50-15 00	15 00-17 75	8 50-10 00	12 00-14 50	8 75-10 75
" 29.	15 70-17 25	16 00-17 30	16 70-17 30	17 00-18 00	16 75-18 00	6 50-15 00	15 00-17 75	8 50-10 00	12 00-14 50	8 75-10 75
Oct. 6.	15 25-17 25	16 25-17 15	16 25-17 25	17 25-18 50	17 00-18 00	6 50-15 00	15 00-17 75	8 50-10 00	11 50-13 90	9 00-11 25
" 13.	14 00-15 60	14 90-15 65	14 65-15 60	17 00-18 35	16 75-18 35	6 25-14 00	14 50-17 75	8 50-10 00	11 25-14 00	8 50-10 60
" 20.	14 00-15 65	15 15-15 75	14 90-15 75	17 25-18 50	17 00-18 35	6 00-13 50	14 00-17 50	8 50-10 00	10 30-13 40	8 00-9 75
" 27.	13 60-15 00	14 50-15 00	14 15-15 00	16 75-18 00	16 50-18 00	5 25-13 50	13 50-16 75	8 25-10 50	10 50-13 40	8 25-10 50
" 34.	12 25-13 00	12 75-13 25	12 25-13 15	17 00-18 35	17 00-18 25	5 25-13 00	11 50-13 50	8 00-10 75	9 75-12 50	9 00-10 75

IX. Wholesale Prices per lb. of Produce as on the 15th of Each Month, at Principal Markets, 1920.

SOURCE: Dealers' quotations.

Description.	May.	June.	July.	Aug.	Sept.	Oct.
	cents.	cents.	cents.	cents.	cents.	cents.
Montreal—						
Hams, smoked—light, under 20 lb....	42-43	45	48	50	50	49
Bacon, light under 12 lb.....	44-47	49	53	50-53	52	51
Barrelled Mess Pork.....	25	24	75	22½	21½	19½
Beef, carcass fresh (No. 1) Butcher (good steers and heifers).....	26½	27-27½	28½	27½	26½	24½
Barrelled Plate Beef.....	15	15	16½	16½	16½	16½
Lambs, yearlings.....	—	—	34	26-28	27-29	27-29
Sheep, good.....	23-24	27-29	24	20-22	20-22	20-22
Lard, tierces.....	30½	28½	38½-30½	29½	31	32½
Butter, creamery prints.....	58	58	60-61	61	62	58
Butter, creamery solids.....	57	57	59-60	60	61	57
Butter, Dairy prints.....	55	57	—	—	—	—
Eggs, fresh, select.....	55	—	60-64	66	68	68
Cheese, large, coloured, new.....	—	—	31	31	36	36
Toronto—						
Hams, smoked, light, under 20 lb....	43	40	47	46	46	48
Bacon, light, under 12 lb.....	47	48-49	52	48-49	50	51
Barrelled Mess Pork.....	27	27	27	24	23	21½
Beef, carcass, fresh (No. 1) Butcher (good steers and heifers).....	25	26	28	28	27	26
Barrelled Plate Beef.....	18½	18½	18½	18½	51	15
Lambs, yearlings.....	—	32-24	28-30	28-30	26-29½	26½-29
Sheep, good.....	30	—	15-22	13-19	13-20	13-18
Lard, tierces.....	27½	29	29	27½	28	31½
Butter, creamery prints.....	64	57	60	61	62	64
Butter, creamery, solids No. 1.....	63½	56½	59½	60½	61½	63½
Butter, dairy prints.....	50	50	50	51	51	51
Eggs, fresh, specials.....	60	57	59	65	66	68
Cheese, large, coloured, new.....	34	32½	31	31	30	30
Winnipeg—						
Hams, smoked, light, under 20 lb.....	39½-41½	39-40½	46	46-48	46-48	44-46
Bacon, light, under 12 lb.....	46½	50	49½	49½	49½	49½
Barrelled Mess Pork.....	24½	25½	25½	25½	25½	21½
Beef, carcass, fresh (No. 1) Butcher (good steers and heifers).....	20½-20½	28	21	22	20	20
Barrelled Plate Beef.....	—	—	—	—	18½	18½
Lard tierces.....	30½	28½	30	30	29½	34
Butter, creamery prints.....	70	59	61	60-63	62	59-62
Butter, creamery solids.....	69	58	60	58	60	57-60
Butter, dairy prints.....	52	48	52	52	50-51	55
Eggs, fresh.....	—	50	57	63	65	63
Vancouver—						
Hams, smoked, light, under 20 lb.....	48-49	48-49	49-50	50-51	50-52	50-52
Bacon, light, under 12 lb.....	50	50	52	53	54	54
Barrelled Mess Pork.....	30	30	30	30	30	30
Beef carcass, fresh (No. 1) Butcher, (good steers and heifers).....	25-26	27	23½	24	20	18
Barrelled Plate Beef.....	18	18	—	18	18	18
Sheep, good.....	35	28	28	25	25	23
Lard, tierces.....	29½	29½	29½	30	30	30
Butter, creamery prints.....	69	61	62	52-64	62	62
Butter, creamery solids.....	68	60	58-60	61	61	60
Butter, dairy prints.....	52	51	51	53	50	50
Butter, dairy solids.....	51	51	50	52	49	49
Eggs, fresh, select.....	55	56	58	65	78	90
Cheese, large, new.....	33	33	33	33	32	32



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THOMAS MULVEY

Printer to the King's Most Excellent Majesty

1920

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DOMINION STATISTICIAN: R. H. COATS, B.A., F.S.S. CHIEF, DIVISION OF AGRICULTURAL STATISTICS: ERNEST H. GODFREY, F.S.S. DOMINION BUREAU OF STATISTICS, OTTAWA, CANADA.

WORLD'S PRODUCTION OF CEREALS AND POTATOES.

In this article the attempt is made to present, according to the sources available, the latest information respecting the world's production of the principal cereal and potato crops for the year 1920, as compared with 1919 and with the averages of previous years where such can be given. The chief source whence the figures are derived is the International Crop Report of the International Agricultural Institute at Rome, especially the latest issue for November, 1920, the metric denominations having been converted into Canadian equivalents.

PRODUCTION OF THE NORTHERN HEMISPHERE.

In Table I on pages 346 to 349 are reproduced the area and production of these crops in countries of the northern hemisphere for the year 1920, as compared with 1919 and with the annual averages of the five years 1914-1918. The information which the Institute is now able to collect and publish is much less complete than what it was before the war. The Russian Empire, which formerly was the world's second or third largest wheat-exporting country, has dropped out entirely; and it is difficult, if not impossible, to obtain trustworthy information respecting agricultural conditions in most of the countries which formerly owed allegiance to the late Czar. In the table are included only those countries for which the information is complete in respect of all the columns, as published in the November International Crop Report. The countries in the table represent approximately for wheat 60, for rye 13, for barley 46 and for oats 57 p.c. of the world's yields. The following is a brief analysis of the facts presented by the table.

Wheat.—For the 17 countries in the table, the area sown to wheat in 1920 was 146,288,000 acres, a net decrease as compared with 1919 of 14,080,000 acres, or 8·8 p.c. The area sown was also less than the five year average by 772,000 acres, or 0·5 p.c. Ten countries showed a decrease in the area sown to wheat as compared with 1919, the largest decrease for any country being 19,592,000 acres in the United States. On the other hand, six countries showed an increase, and one country was stationary, the chief increase being 6,178,000 acres, or 26 p.c., in India, representing a recovery from the abnormally small acreage of the previous year. The average yield per acre for the seventeen countries is $14\frac{1}{2}$ bushels, as compared with

[Continued on p. 348.]

I. Area and Production of Cereals and Potatoes in Countries of the Northern Hemis-

Countries	1919	1920	Average 1914-18	Per cent of 1919	Per cent of average
	000 acres	000 acres	000 acres	p.c.	p.c.
Wheat—					
Bulgaria.....	2,080	2,154	2,415	103.6	89.2
Spain.....	10,378	10,050	10,087	96.8	99.6
Finland.....	19	19	18	100.0	109.9
France.....	11,376	11,995	12,464	105.4	96.2
England and Wales.....	2,221	1,875	2,073	84.4	90.4
Italy.....	10,592	11,293	11,462	106.6	98.5
Netherlands.....	168	156	143	92.8	109.2
Sweden.....	348	360	326	103.4	110.4
Switzerland.....	130	119	130	91.1	91.3
Canada.....	19,126	18,232	14,577	95.3	125.1
United States (winter wheat).....	49,906	34,165	35,283	68.5	96.8
United States (spring wheat).....	23,338	19,487	18,837	83.5	103.5
Guatemala.....	21	24	27	112.8	88.2
British India.....	23,798	29,976	31,943	126.0	93.8
Japan.....	1,344	1,335	1,297	99.3	102.9
Algeria.....	2,800	2,647	3,251	94.6	81.4
Egypt.....	1,323	1,190	1,349	89.9	88.3
Tunis.....	1,400	1,211	1,378	86.5	87.9
Totals and averages.....	160,368	146,288	147,060	91.2	99.5
Rye—					
Bulgaria.....	446	417	480	93.5	86.8
Spain.....	1,808	1,920	1,835	106.2	104.6
Finland.....	602	602	584	100.0	103.1
France.....	1,907	2,000	2,131	104.9	93.9
Italy.....	273	282	286	103.1	98.5
Netherlands.....	497	489	509	98.3	96.1
Sweden.....	920	914	921	99.3	99.2
Switzerland.....	55	50	58	91.9	86.0
Canada.....	753	650	230	86.3	282.8
United States.....	6,963	5,470	3,918	78.6	139.6
Totals and averages.....	14,224	12,794	10,952	89.9	116.8
Barley—					
Bulgaria.....	474	502	587	106.0	85.5
Spain.....	4,254	4,265	3,859	100.3	110.5
Finland.....	293	293	283	100.0	103.4
France.....	1,387	1,495	1,593	107.8	93.9
England and Wales.....	1,510	1,638	1,406	108.5	116.5
Italy.....	480	494	552	103.0	89.5
Netherlands.....	59	56	60	97.4	92.2
Sweden.....	412	402	429	97.4	93.6
Switzerland.....	19	18	18	96.0	100.0
Canada.....	2,646	2,552	2,112	96.5	120.8
United States.....	7,420	7,437	8,229	100.2	90.4
Japan.....	2,893	2,691	3,066	93.0	87.8
Algeria.....	2,640	2,444	2,896	92.6	84.4
Egypt.....	357	340	427	95.4	79.8
Tunis.....	1,105	939	1,145	85.0	82.0
Totals and averages.....	25,949	25,566	26,662	98.5	95.9

phere, 1920, as compared with 1919 and with Annual Averages of the five years 1914-18.

1919	1920	Average 1914-18	Per cent of 1919	Per cent of average	1919	1920	Average 1914-18
000 bush.	000 bush.	000 bush.	p.c.	p.c.	bush. per acre	bush. per acre	bush. per acre
34,029	41,190	29,308	121.0	140.5	16.36	19.12	12.14
129,251	134,457	137,221	104.0	98.0	12.45	13.37	13.60
306	272	229	88.9	118.6	15.94	14.17	13.09
182,446	230,406	214,139	126.3	107.6	16.04	19.21	17.18
63,808	53,416	64,483	83.7	82.8	28.72	28.48	31.11
169,771	141,096	167,991	83.1	84.0	16.03	12.49	14.66
5,763	6,677	5,321	115.9	125.5	34.30	42.80	37.21
9,509	11,123	8,707	117.0	127.8	27.32	30.80	26.70
3,524	3,586	4,205	101.8	85.3	27.10	30.13	32.34
193,260	293,361	248,084	151.8	118.3	10.00	16.00	17.01
731,648	532,650	562,037	72.8	94.8	14.66	15.56	15.72
209,354	218,011	259,214	104.1	84.1	8.97	11.18	13.76
251	312	632	124.1	49.4	11.78	13.00	23.23
280,298	376,768	352,986	134.4	106.7	11.77	12.56	11.05
30,676	29,477	27,802	96.1	106.0	22.82	22.08	21.43
19,166	8,929	33,191	46.6	26.9	6.84	3.37	10.20
30,137	31,711	34,186	105.2	92.8	22.77	26.64	25.34
6,981	4,766	7,047	68.3	67.6	4.98	3.93	5.11
2,100,178	2,118,208	2,156,783	100.9	98.2	13.10	14.48	14.67
6,490	8,931	5,799	137.6	154.0	14.55	21.42	12.07
23,297	32,053	26,696	137.6	120.1	12.87	16.69	14.42
10,505	9,173	9,990	87.3	91.8	17.45	15.23	17.10
28,736	33,174	32,794	115.4	101.2	15.06	16.58	15.38
4,571	4,527	4,931	99.1	91.8	16.74	16.05	17.24
14,493	14,223	13,301	98.1	106.9	29.16	29.09	26.13
23,073	24,943	21,092	108.1	118.3	25.08	27.27	22.90
1,575	1,622	1,676	103.0	96.8	28.85	32.31	28.75
10,207	12,190	3,948	119.4	308.7	13.50	18.75	17.25
88,476	77,892	59,933	88.0	130.0	12.70	14.24	15.29
211,423	218,728	180,160	103.5	121.4	14.86	17.10	16.45
10,371	12,511	10,048	120.6	124.5	21.88	24.92	17.12
81,809	89,146	82,071	109.0	108.6	19.23	20.90	21.27
5,295	4,983	4,527	94.1	110.1	18.07	17.01	16.00
22,964	35,399	35,923	154.2	98.5	16.56	23.68	22.55
45,617	52,800	46,242	115.7	114.2	32.10	32.23	32.89
8,327	5,833	9,037	70.0	64.5	17.35	11.81	16.37
2,387	2,846	2,718	119.2	104.7	40.73	51.19	45.07
12,892	11,121	12,538	86.3	88.7	31.29	27.66	29.23
625	620	617	99.3	100.4	33.78	34.83	34.66
56,389	65,559	53,066	116.3	123.5	21.25	25.75	25.10
165,715	191,382	214,815	115.5	89.1	22.33	25.87	26.10
95,339	95,840	94,746	105.5	101.2	32.96	35.62	30.90
25,538	9,526	40,108	37.3	23.8	9.67	3.90	13.88
10,087	7,475	12,296	74.1	60.8	28.25	21.99	28.80
5,512	3,169	7,918	57.5	40.0	4.99	3.37	6.92
548,867	588,210	626,670	107.2	93.9	21.15	23.00	23.50

I. Area and Production of Cereals and Potatoes in Countries of the Northern Hemisphere

Countries	1919	1920	Average 1914-18	Per cent of 1919	Per cent of average
	000 acres	000 acres	000 acres	p.c.	p.c.
Oats—					
Bulgaria.....	301	319	364	105.8	87.6
Spain.....	1,595	1,574	1,402	98.7	112.3
Finland.....	1,013	1,013	969	100.0	104.6
France.....	7,055	8,065	7,748	114.3	104.1
England and Wales.....	2,564	2,264	2,228	88.3	101.6
Italy.....	1,130	1,161	1,169	102.8	99.3
Netherlands.....	389	392	365	100.6	107.4
Sweden.....	1,762	1,758	1,911	99.8	92.0
Switzerland.....	57	56	79	97.4	70.3
Canada.....	14,952	15,850	12,143	106.0	130.5
United States.....	42,401	41,032	41,774	96.8	98.2
Japan.....	218	282	147	129.4	192.4
Algeria.....	533	576	594	108.0	97.0
Tunis.....	135	124	145	91.4	85.2
Totals and averages.....	74,105	74,466	71,038	105.5	104.8
Corn—					
Italy.....	3,709	3,707	3,823	99.9	96.9
Switzerland.....	6	5	4	88.5	127.8
Canada.....	265	292	233	110.2	125.3
United States.....	102,076	103,649	107,226	101.5	96.7
Guatemala.....	674	553	599	82.1	92.4
Tunis.....	45	29	44	65.6	66.3
Totals and averages.....	106,775	108,235	111,929	101.3	96.7
Potatoes—					
Finland.....	204	198	201	97.0	98.4
England and Wales.....	475	545	499	114.6	109.2
Italy.....	763	741	730	97.2	101.5
Netherlands.....	445	421	431	94.6	97.7
Sweden.....	417	366	385	87.9	95.1
Switzerland.....	136	123	132	90.7	93.4
Canada.....	819	785	565	95.8	138.9
United States.....	4,013	3,849	3,938	95.9	97.7
Totals and averages.....	7,272	7,028	6,881	96.6	102.1

[Continued from p. 346.]

13.1 bushels in 1919 and with 14.67 bushels, the five year average. Yields per acre in excess of last year, and of the five year average, were obtained in six countries (Bulgaria, France, Netherlands, Sweden, Egypt and India); yields in excess of last year, but below average, were obtained by five countries (Spain, Switzerland, Canada, the United States and Guatemala); yields below last year, but above average, were obtained in two countries (Finland and Japan) and yields below both those of last year and of the average were obtained in four countries (England and Wales, Italy, Algeria and Tunis). The better yields per acre caused the total yield from the 17 countries, notwithstanding the large decrease in acreage, to be 2,118,208,000 bushels, which is 18,030,000 bushels, or 0.9 p.c., more than in 1919 and 38,575,000 bushels, or 1.8 p.c., less than the five year average.

where, 1920, as compared with 1919 and with Annual Averages of the five years 1914-16

1919	1920	Average 1914-18	Per cent of 1919	Per cent of average	1919	1920	Average 1914-18
000 bush.	000 bush.	000 bush.	p.c.	p.c.	bush. per acre	bush. per acre	bush. per acre
6,953	9,159	6,230	131.7	144.7	23.10	28.71	17.11
30,979	37,294	30,847	120.4	120.9	19.42	23.69	22.00
22,714	23,116	23,663	101.8	97.7	22.42	22.82	24.40
161,688	273,814	230,546	169.3	118.8	22.92	33.95	29.63
104,456	98,739	102,056	94.5	96.7	40.74	43.61	45.81
32,654	22,695	30,793	69.5	73.7	28.89	19.55	26.34
19,446	22,857	19,858	117.5	115.1	49.99	58.31	54.41
72,087	62,281	65,205	86.4	95.5	40.91	35.42	34.12
2,607	2,931	4,575	112.4	64.1	45.66	52.72	57.84
394,387	543,058	403,513	137.7	134.6	26.25	34.25	33.25
1,174,883	1,359,449	1,331,352	115.7	102.1	27.71	33.13	31.87
8,715	10,506	5,899	120.6	178.1	39.96	37.27	40.13
10,008	4,761	14,495	47.6	32.8	18.78	8.27	24.40
2,918	1,427	3,046	48.9	46.8	21.62	11.51	21.01
2,044,495	2,472,087	2,272,078	120.9	108.8	27.59	33.20	31.98
85,846	86,610	93,888	100.9	92.2	23.14	23.36	24.56
287	280	209	97.5	133.5	44.84	49.12	47.50
16,941	13,764	11,308	81.2	121.7	64.00	47.25	48.50
2,917,426	3,199,099	2,760,461	109.7	115.9	28.58	30.86	25.74
4,939	4,062	9,398	82.3	43.2	7.33	7.35	15.69
256	197	229	76.9	85.9	5.66	6.63	5.12
3,025,695	3,304,012	2,875,493	109.2	114.9	28.33	30.53	25.69
17,718	17,865	17,741	100.8	100.7	86.85	90.23	88.26
102,032	116,227	118,456	113.9	98.1	214.80	213.26	237.37
50,989	51,441	54,414	100.9	94.5	66.82	69.42	74.53
105,317	91,304	102,164	86.7	89.4	236.66	216.87	237.03
77,554	60,227	66,951	77.6	90.0	185.98	164.54	173.81
27,925	28,256	28,219	101.2	100.1	205.33	229.72	213.78
125,575	138,527	78,712	110.3	175.9	153.50	176.50	139.25
357,907	421,259	382,119	117.7	110.2	89.19	103.44	97.03
865,017	925,106	848,776	106.9	109.0	118.95	131.63	123.35

Rye.—The yield in 1920 of the ten countries in Table I is 218,728,000 bushels from 12,794,000 acres, an average yield per acre of 17.10 bushels, as against 14.86 bushels last year and 16.45 bushels, the five year average. The acreage is 10.1 p.c. below that of last year, but 16.8 p.c. above that of the five year average. The total yield is 3.5 p.c. above that of 1919 and 21.4 p.c. above the average. Three countries (Spain, France and Italy) have larger acreages than last year; Finland is stationary and six countries (Bulgaria, Netherlands, Sweden, Switzerland, Canada and the United States) have reduced areas. As compared with the five year average, all the European countries in the table, except Spain and Finland, have smaller acreages. On this side of the Atlantic the rye acreage of Canada is 182.8 p.c., and that of the United States 39.6 p.c., above

the average. In yield, all the countries, excepting Finland, Italy, Netherlands and the United States, exceed last year, and all countries, except Italy, Switzerland, and Finland, exceed the average, Canada to the extent of 208, the United States by 30, Bulgaria by 54 and Spain by 20 p.c.

Barley.—The acreage sown to this crop in 1920 in 15 countries is 25,566,000, as compared with 25,949,000 in 1919 and with 26,662,000, the average for the five years 1914-18. The total for 1920 is 1.5 p.c. less than in 1919 and 4.1 p.c. less than the average. The total yield is 588,210,000 bushels in 1920, as compared with 548,867,000 bushels in 1919 and 626,670,000 bushels, the five year average. The total for 1920 is 7.2 p.c. above that of last year and 6.1 p.c. below the average. The yield per acre for the 15 countries is 23 bushels, as against 21.15 bushels in 1919 and 23.50 bushels, the average. As compared with 1919, the acreage is the same or more in seven countries (Bulgaria, Spain, Finland, France, England and Wales, Italy and the United States), and less in eight countries (Netherlands, Sweden, Switzerland, Canada, Japan, Algeria, Egypt and Tunis). In yield, eight countries are more than last year (Bulgaria, Spain, France, England and Wales, Netherlands, Canada, United States and Japan), whilst the remaining seven (Finland, Italy, Sweden, Switzerland, Algeria, Egypt and Tunis) are less. As compared with the average, eight countries (Bulgaria, Spain, Finland, England and Wales, Netherlands, Switzerland, Canada and Japan) have higher yields, whilst those of seven countries (France, Italy, Sweden, the United States, Algeria, Egypt and Tunis) have lower.

Oats.—For 14 countries the area under oats in 1920 was 74,466,000 acres, as compared with 74,105,000 acres in 1919, an increase of $5\frac{1}{2}$ p.c., and as compared with 71,038,000 acres, the five year average, an increase of 4.8 p.c. The total yield of oats in 1920 is 2,472,087,000 bushels, as compared with 2,044,495,000 bushels, an increase of 20.9 p.c. The average yield for the five years 1914-18 was 2,272,078,000 bushels; so that the increase over average represents 8.8 p.c. The average yield per acre for the 14 countries is 33.20 bushels, as against 27.59 bushels in 1919 and about 32 bushels the five year average. Increased areas were sown to oats in seven countries (Bulgaria, France, Italy, Netherlands, Canada, Japan and Algeria) and equal or reduced areas in seven countries (Spain, Finland, England and Wales, Sweden, Switzerland, the United States and Tunis). The yield was greater than last year in all but five countries (England and Wales, Italy, Sweden, Algeria and Tunis), and the larger total was due to the substantial increases in the big oat-producing countries of France, 69.3 p.c., Canada 37.7 p.c. and the United States 15.7 p.c.

Corn.—Of the six countries included in the table only the United States and Italy are large corn-producing countries, and for 1920 the record crop in the United States of 3,199,099,000 bushels represents 96.8 p.c. of the total of 3,304,012,000 bushels. The area for all six countries in 1920 is 1.3 p.c. above that of 1919, but 3.3 p.c. below the

five year average. In yield, the total for 1920 is 9·2 p.c. above that of 1919 and 14·9 p.c. above the average. The average yield per acre is a little more than 2 bushels above that of 1919 and about 5 bushels above the five year average.

Potatoes.—Of the eight countries in the table, only three, the United States, Canada, and England and Wales, have a total yield in 1920 which exceeds 100 million bushels. For all the eight countries the area planted was 3·4 p.c. below that of 1919 but 2·1 p.c. above the five year average. The total yield however was 6·9 p.c. above that of 1919 and 9 p.c. above the average. Both the United States and Canada produced average yields per acre considerably in excess both of last year and of the average.

II. Area and Yield of Cereals and Potatoes in Countries of the Northern Hemisphere, not included in Table I, 1919 and 1920.

Countries.	Wheat.				Rye.			
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
	000 acres.	000 acres.	000 bush.	000 bush.	000 acres.	000 acres.	000 bush.	000 bush.
Germany.....	—	3, 074	79, 702	88, 000	10, 842	10, 703	240, 163	193, 088
Belgium.....	329	282	9, 895	7, 949	496	506	13, 681	13, 701
Denmark.....	125	165	5, 923	6, 088	559	519	14, 909	—
Serb-Croat Slovene..	3, 380	3, 951	50, 956	64, 712	682	948	9, 816	18, 125
Scotland.....	79	54	3, 064	2, 080	6	7	—	—
Ireland.....	69·7	50	2, 452	1, 402	5	6	143	136
Greece.....	9, 355	—	9, 693	13, 288	58	—	1, 081	1, 307
Hungary.....	—	—	20, 000	29, 139	—	1, 248	—	16, 520
Poland.....	—	—	18, 000	18, 258	—	—	—	74, 842
Rumania:								
Former Kingdom.	2, 965	2, 072	48, 492	—	219	182	3, 430	—
Bessarabia.....	1, 273	1, 180	16, 988	—	482	316	5, 890	—
Bukovina.....	33	26	580	—	47	35	726	—
Transylvania.....	—	1, 705	—	—	—	190	—	—
Czecho-Slovakia.....	—	1, 494	—	24, 436	—	2, 181	—	33, 439
Morocco.....	1, 551	1, 974	—	5, 077	—	—	—	—

Countries.	Barley.				Oats.			
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
	000 acres.	000 acres.	000 bush.	000 bush.	000 acres.	000 acres.	000 bush.	000 bush.
Germany.....	3, 081	3, 273	87, 742	88, 000	7, 240	8, 006	291, 379	237, 600
Belgium.....	75	87	3, 617	3, 842	550	537	25, 837	26, 237
Denmark.....	569	585	24, 522	—	961	1, 001	44, 786	—
Serb. Croat Slovene.	—	1, 181	—	20, 654	—	1, 035	—	26, 916
Scotland.....	174	204	6, 112	7, 784	1, 111	1, 032	42, 440	61, 256
Ireland.....	187	207	8, 125	7, 527	1, 442	1, 332	80, 509	61, 542
Greece.....	300	—	5, 020	7, 183	155	—	2, 587	3, 761
Hungary.....	—	1, 201	—	20, 045	—	836	—	23, 467
Poland.....	—	—	—	39, 309	—	—	—	104, 922
Rumania:								
Former Kingdom.	587	1, 116	11, 797	—	597	1, 134	13, 433	—
Bessarabia.....	1, 297	1, 550	18, 875	—	305	435	6, 931	—
Bukovina.....	58	47	969	—	49	46	1, 117	—
Transylvania.....	—	308	—	—	—	590	—	—
Czecho-Slovakia.....	—	1, 695	—	38, 606	—	1, 947	—	52, 574
Morocco.....	1, 523	1, 903	—	30, 314	8	6	—	—

II. Area and Yield of Cereals and Potatoes in Countries of the Northern Hemisphere, not included in Table I, 1919 and 1920—concluded.

Countries.	Corn.				Potatoes.			
	1919.	1920.	1919.	1920.	1919.	1920.	1919.	1920.
	000 acres.	000 acres.	000 bush.	000 bush.	000 acres.	000 acres.	000 bush.	000 bush.
Germany.....	—	—	—	—	5,387	6,054	788,122	—
Belgium.....	—	—	—	—	319	331	76,065	57,095
Bulgaria.....	1,392	1,419	—	39,650	805	—	101,020	104,762
Czecho-Slovakia.....	—	291	—	6,138	—	1,512	—	—
Denmark.....	—	—	—	—	226	216	—	—
France.....	736	792	9,976	—	3,104	3,332	284,049	—
Scotland.....	—	—	—	—	155	162	31,061	46,181
Ireland.....	—	—	—	—	589	584	102,539	74,141
Hungary.....	—	1,894	—	48,320	—	622	—	71,569
Netherlands.....	445	421	105,317	91,304	445	421	105,317	91,304
Norway.....	—	—	—	—	132	—	37,912	—
Poland.....	—	—	—	1,527	—	—	—	—
Rumania:								
Former Kingdom	4,862	4,831	102,229	—	70	—	2,832	—
Bessarabia.....	1,728	1,367	32,022	—	39	33	2,916	—
Bukovina.....	162	89	3,162	—	71	47	5,096	—
Transylvania.....	—	1,146	—	—	—	130	—	—
Serb. Croat Slovene	—	3,018	—	86,556	—	35	—	38,899
Spain.....	1,179	—	25,555	27,377	805	—	101,020	104,762
Indo-China.....	—	400	—	5,733	—	—	—	—
Japan.....	136	139	—	—	344	334	—	47,278
Algeria.....	15	22	236	253	44	42	—	985
Morocco.....	—	292	—	2,858	—	—	—	—
Tunis.....	—	—	—	—	2	3	138	—
Guatemala.....	—	—	—	—	6	2	694	95

In Table II (pages 351 and 352) is presented the available information for those countries that are not included in Table I. They consist chiefly of the countries affected by the war and the boundary adjustments following therefrom; but also of countries whose data are complete with the exception of the yields of 1920, not yet reported. Taking from the table the totals for those countries which have reported their yields for both 1919 and 1920 we get the following statement:

Crop.	Countries.	1919.	1920.	Per cent of 1919.
	No.	000 bush.	000 bush.	p.c.
Wheat.....	9	199,685	230,916	115.6
Rye.....	5	264,884	226,357	85.4
Barley.....	5	110,616	114,336	103.3
Oats.....	5	442,752	390,396	88.1
Corn.....	3	131,108	118,934	90.5
Potatoes.....	6	517,022	478,245	92.4

Adding these figures to those of Table I, we get the following as the total production of the countries in the northern hemisphere, so far as official figures are available (Table III).

III. Total Production of Cereals and Potatoes in the Northern Hemisphere, 1919 and 1920.

Crop.	Countries.	1919.	1920.	Per cent of 1919.
	No.	000 bush.	000 bush.	p.c.
Wheat.....	26	2,299,863	2,349,124	102.1
Rye.....	15	476,307	445,085	93.4
Barley.....	20	659,483	702,546	106.5
Oats.....	19	2,487,247	2,862,483	115.0
Corn.....	9	3,156,803	3,422,946	108.4
Potatoes.....	14	1,382,039	1,403,351	101.5

We are now able to form a fair idea of the value of the harvest of 1920, as compared with 1919, for the countries of the northern hemisphere. For 26 countries, wheat gives a total of 2,349,124,000 bushels, as compared with 2,299,863,000 bushels in 1919, an increase of 49,261,000 bushels, or 2.1 p.c.; rye, in 15 countries, 445,085,000 bushels, as against 476,307,000 bushels, a decrease of 31,222,000 bushels, or 6.5 p.c.; barley in 20 countries, 702,546,000 bushels, as against 659,483,000 bushels, an increase of 43,063,000 bushels, or 6.5 p.c.; oats in 19 countries, 2,862,483,000 bushels, as against 2,487,247,000 bushels, an increase of 375,236,000 bushels, or 15 p.c.; corn, in 9 countries, 3,422,946,000 bushels, as against 3,156,803,000 bushels, an increase of 266,143,000 bushels, or 8.4 p.c.; and potatoes, in 14 countries, 1,403,351,000 bushels, as against 1,382,039,000 bushels, an increase of 21,312,000 bushels, or 1.5 p.c. These totals include the figures for all the principal grain-growing countries of the northern hemisphere with the following exceptions: Austria, Czecho-Slovakia, Rumania, Russia, Norway and several smaller countries. In regard to some of these countries data are given in Table II, but the particulars being incomplete for purposes of comparison they are not included in the statement of totals.

PRODUCTION OF THE SOUTHERN HEMISPHERE.

The figures given above relate exclusively to countries of the northern hemisphere. To ascertain approximately the world's total grain production (Russia excepted) we must add the yields in the countries of the southern hemisphere. For the year 1920-21 the production is not yet definitely known, although forecasts and preliminary estimates have been issued for certain of the countries, including Argentina, whose wheat yield for 1920-21 is estimated preliminarily at 223,034,000 bushels.

In Table IV the data respecting area and yield of the principal grain-growing countries in the southern hemisphere (Argentina, Uruguay, Union of South Africa, Australia and New Zealand) for the year 1919-20, as compared with the year 1918-19, is reproduced from the International Crop Report of June, 1920.

IV. Production of Cereals in Countries of the Southern Hemisphere, 1919-20, as compared with 1918-19 and with Annual Averages of the five years 1913-14 to 1917-18.

Crops and Countries.	1918-19.	1919-20.	Average 1913-14 to 1917-18.	Per cent of 1918-19.	Per cent of Average.
	000 acres.	000 acres.	000 acres.	p.c.	p.c.
Wheat—					
Argentina.....	16,976	14,957	16,420	88.1	91.1
Uruguay.....	840	721	880	85.8	81.9
Union of South Africa...	953	801	795	84.0	100.6
Australia.....	8,649	7,413	10,546	85.7	70.3
New Zealand.....	208	143	282	68.8	58.4
Total.....	27,626	24,035	28,923	87.0	83.1
Oats—					
Argentina.....	2,980	2,301	2,849	77.2	80.7
Uruguay.....	85	85	116	99.7	73.1
Union of South Africa...	641	558	434	87.0	128.6
Total.....	3,706	2,944	3,399	79.4	86.6
Corn—					
Argentina.....	8,252	8,184	9,651	99.2	84.8
Uruguay.....	552	495	679	89.7	73.0
Union of South Africa...	3,952	3,122	2,889	79.0	08.1
Total.....	12,756	11,801	13,219	92.5	89.3
	000 bush.	000 bush.	000 bush.	p.c.	p.c.
Wheat—					
Argentina.....	171,593	214,142	149,333	124.8	143.4
Uruguay.....	6,890	5,416	7,560	78.6	71.6
Union of South Africa...	8,983	6,630	6,597	73.8	100.5
Australia.....	75,232	44,001	114,893	58.5	38.3
New Zealand.....	6,568	4,005	6,171	61.0	64.9
Total.....	269,266	274,194	284,554	101.8	96.3
Oats—					
Argentina.....	31,776	53,754	52,464	169.2	102.5
Uruguay.....	1,213	1,626	2,012	134.1	80.8
Union of South Africa...	8,960	7,077	8,075	79.0	87.6
Total.....	41,949	62,457	62,551	148.8	99.8
Corn—					
Argentina.....	224,247	258,688	195,791	115.4	132.1
Uruguay.....	6,574	2,784	7,494	42.3	37.1
Union of South Africa...	41,290	36,551	37,552	88.5	97.3
Total.....	272,111	298,023	240,837	109.5	123.7

From this table it will be noticed that for wheat the yield was 1.8 p.c. above that of the previous year, but 3.7 p.c. below the five-year average. Oats yielded 48.8 p.c. above the year 1918-19, but were 0.2 p.c. below average. Corn was 9.5 p.c. above the previous year and 23.7 p.c. above the average.

WORLD'S PRODUCTION OF WHEAT, OATS AND CORN.

By adding together the figures available for the two hemispheres, we get the world totals for wheat, oats and corn as in Table V.

V. World's Production of Wheat, Oats and Corn: Northern Hemisphere, 1919 and 1920; Southern Hemisphere 1918-19 and 1919-20.

Crop and Hemisphere	Countries	1919	1920	Per cent of 1919
	No.	000 bush.	000 bush.	(1918-19)
Wheat—				
Northern.....	26	2,299,863	2,349,124	102.1
Southern.....	5	269,266	274,194	101.8
Total.....	31	2,569,129	2,623,318	102.1
Oats—				
Northern.....	19	2,487,247	2,862,483	115.0
Southern.....	3	41,949	62,457	148.8
Total.....	22	2,529,196	2,924,940	115.6
Corn—				
Northern.....	9	3,156,803	3,422,946	108.4
Southern.....	3	272,111	298,023	109.5
Total.....	12	3,428,914	3,720,969	108.5

Thus, in the case of wheat, for 31 countries the total yield for the year 1920 (1919-20 in the southern hemisphere) is 2,623,318,000 bushels, as compared with 2,569,129,000 bushels in 1919 (1918-19 in the southern hemisphere), representing an increase of 54,189,000 bushels, or 2.1 p.c. For oats, the total in 1920 (1919-20) is 2,924,940,000 bushels, as compared with 2,529,196,000 bushels, an increase of 395,744,000 bushels, or 15.6 p.c. Corn has a total yield in 1920 (1919-20) of 3,720,969,000 bushels, as against 3,428,914,000 bushels, an increase of 292,055,000 bushels, or 8.5 p.c. Thus, so far as comparisons are possible, and subject to the issue of finally revised figures, the world's harvest for 1920 is, in respect of wheat, barley, oats, corn and potatoes, superior to that of 1919 and decidedly so in the case of barley, oats and corn. Only for rye is the production less in 1920 than in 1919; but for this cereal the large rye-producing countries of Germany, Austria and Russia are conspicuously absent.

INTERNATIONAL WHEAT MOVEMENT.

So far we have dealt solely with acreage and production. It may be well finally to examine briefly the position in respect of the international trade in wheat, the world's great food commodity. A "Memorandum on the World's Wheat," dated December 16, 1920, by Sir James Wilson, K.C.S.I., formerly British delegate to the International Institute of Agriculture, goes very exhaustively into the whole situation, including the questions of shipping facilities, freight rates and currency exchange. Prior to the war the chief wheat-importing countries were, in order of quantities imported: Britain, Germany, Italy, Austria, Belgium, France, Holland, Switzer-

land and Egypt, all importing more than 7.3 million bushels, besides seven other countries each importing less than 7.3 million bushels. The chief exporting countries were, in order of quantities exported: Russia, the United States, Canada, Argentina, Rumania, Australia, India, Hungary and Bulgaria, besides four other countries each exporting less than 7.3 million bushels. For 16 importing countries the total average annual yield for the five crop years 1909-13 (1909-10 to 1913-14, southern hemisphere) was 1,011.9 million bushels, the net imports were 562.9 million bushels and the consumption 1,574.8 million bushels. For 13 exporting countries the production was 2,656.9 million bushels, the net export was 664.7 million bushels, and the consumption 1,992.2 million bushels. For the 29 countries (16 importing and 13 exporting) the total production was 3,668.8 million bushels, and the consumption 3,567 million bushels.

The broad effect of the war in respect of wheat was considerably to curtail the production of the importing countries, which included the principal European belligerents, and to increase the production of the overseas exporting countries. The following statement from Sir James Wilson's Memorandum makes this clear:

Countries	Number of Countries	Period	Yield	Net Import (+) or Export (-)	Consumption
			million bush.	million bush.	million bush.
Importing.....	13	Pre-war average	783.7	+393.9	1,177.6
		War average....	691.9	+403.4	1,095.3
Exporting.....	8	Pre-war average	1,535.9	-394.3	1,141.6
		War average....	1,761.9	-557.0	1,204.8
Total.....	21	Pre-war average	2,319.6	-	2,319.2
		War average....	2,453.8	-	2,300.1

Further calculations given in the Memorandum tend to show that the wheat requirements of the importing countries during the current crop year ending July 31, 1921, may be about 624.6 million bushels, as compared with 668.7 million bushels, the quantity imported in 1919-20 and with 661.4 million bushels, the average import before the war. On the other hand, the exportable surplus of the wheat-exporting countries during the crop year 1920-21 may be placed at 830.4 million bushels (378.5 million bushels old wheat and 451.9 million bushels wheat from the harvests of 1920-21); but this quantity includes 110.2 million bushels for Russia and 80.8 million bushels for India, both of which countries may not answer expectations, Russia being at present not an exporting country at all and India being at present limited by Government control to an export of only 14.7 million bushels. If therefore 176.3 million bushels be deducted from the estimate there remain 654.1 million bushels as the possible

exportable surplus, which compares with 690.8 million bushels in 1919-20 and with 664.7 million bushels, the annual average for the pre-war period 1909-14. The surplus of about 654 million bushels consists of 194.7 from the United States, 194.7 from Canada, 128.6 from Argentina, 110 from Australia, 14.7 from India and 11 from Bulgaria. Thus it is apparent that the exportable surplus anticipated should exceed the requirements of the importing countries by about 29.4 million bushels, not counting the possible release of surpluses from Russia and India, placed respectively at 110.2 and 66.1 million bushels. These are amongst the uncertain factors which govern the situation respecting the demand, supply and price of the world's wheat.

Dominion Bureau of Statistics,
Ottawa, January 4, 1921.

ERNEST H. GODFREY,
Chief, Division of Agricultural Statistics.

WORLD'S PRODUCTION OF WOOL, 1919.

According to the Annual Wool Review for 1919 of the National Association of Wool Manufacturers, Boston, U.S.A., the world's wool production is 2,893,843,000 lb., distributed by countries as in the following table:

Country.	Production.	Country.	Production.
	000 lb.		000 lb.
North America—		Asia—	
United States (1919).....	314,239	British India.....	60,000
Canada and Newfoundland.....	15,000	China.....	50,000
Mexico.....	6,500	Persia.....	12,146
Total, North America.....	335,739	Russia in Asia.....	113,359
		Turkey in Asia.....	90,000
Central America and West Indies.....	750	All other.....	1,000
		Total, Asia.....	326,505
South America—		Africa—	
Argentina.....	315,000	Algeria.....	33,184
Brazil.....	35,000	British S. Africa (1918).....	100,391
Chile.....	26,000	Tunis.....	3,735
Peru.....	9,420	All other.....	13,000
Falkland Islands.....	3,200	Total, Africa.....	150,310
Uruguay.....	90,000	Oceania—	
All other.....	5,000	Australia and Tasmania (1918).....	617,000
Total, South America.....	483,620	New Zealand.....	208,000
Europe—		Total, Australasia.....	825,000
Austria-Hungary.....	41,600	All other.....	100
France.....	50,000	Total, Oceania.....	825,100
Greece.....	16,000	Total for the world.....	2,893,843
Germany.....	25,600		
Italy.....	21,500		
Portugal.....	6,500		
Russia in Europe.....	320,000		
Spain.....	52,000		
Turkey and Balkan States.....	90,500		
United Kingdom (1918).....	113,119		
All other.....	30,000		
Total, Europe.....	771,819		

The total estimated number of sheep in the world in 1919 was 577,125,433, as compared with 591,911, 314, a reduction of 24,785,881. This reduction is accounted for by the smaller number credited to Argentina, where the total is 11,000,000 less, and in Uruguay where there is a drop of 13,527,148.

VALUE OF CANADIAN FIELD CROPS, 1918-1920.

Preliminary estimate, based on the provisional estimate of yields and on the current market quotations of local prices.

The Dominion Bureau of Statistics issued on December 6, 1920, a preliminary estimate of the value of this year's field crops, as compared with the final estimates of the two previous years, 1918 and 1919. Hitherto, an annual preliminary estimate of values has been made by the Bureau for Canada only; but this year the estimate is made for each province as well. The values per unit assigned to each crop, and adopted after consultation with each of the nine provincial Departments of Agriculture, are calculated from current market quotations and they represent the average prices received locally by farmers. As there appear to be indications of a continuous fall in agricultural prices, it is probable that the final returns, when published in January next, will show values less than those now estimated:

For the whole of Canada, the total value of the field crops of 1920, as preliminarily estimated, amounts to \$1,636,664,900, as compared with \$1,452,437,500 in 1919, and \$1,372,935,970 in 1918, the amounts for 1919 and 1918 representing the final estimates. The total for 1920 is made up of \$536,730,000 for wheat, as compared with \$364,857,000 in 1919 and \$381,677,700 in 1918; of \$307,121,400 for oats, as compared with \$317,097,000 and \$331,357,400; of \$60,408,600 for barley, as against \$77,462,700 and \$77,378,670; of \$126,315,400 for other grains, as against \$128,490,000 and \$147,510,000; of \$139,908,000 for potatoes, as against \$118,894,200 and \$102,235,300; of \$370,414,000 for hay, clover and alfalfa, as against \$353,892,400 and \$249,240,800; and of \$95,767,500 for other root and fodder crops, as against \$91,744,200 and \$83,536,100.

The unit price for wheat, viz., \$1.83 per bushel, is 6 cents less than that of last year; and the greatly increased total value is due to the total production which is larger than that of last year by about 100 million bushels. On the other hand, the total value of oats is about \$10,000,000 less than that of last year, although the total yield shows an increase of over 148 million bushels, being in fact the largest on record. The decreased value is due to the lower price per bushel, which is placed at 57 cents instead of 80 cents. Hay, clover and alfalfa, though less in yield, are higher in value on account of the high price per ton, which is \$26.59 for hay and

clover as against \$20.72 last year and \$16.25 in 1918. The prices for hay this year constitute a record. The total value for potatoes is the highest on record and is due to the record crop; but as large losses are indicated as likely to occur through rotting, the value for 1920 must be regarded as subject to discount.

The accompanying Tables give (I), by provinces, the total and unit values for each crop and (II), by provinces, the total values of all field crops, according to the preliminary estimate for 1920 and the final estimates for 1918 and 1919.

I. Preliminary Estimate of the Value of Field Crops in Canada, by Provinces, for 1920, as compared with the Final Estimates for 1918 and 1919.

Field Crops.	1918.		1919.		1920.	
	\$	cts.	\$	cts.	\$	cts.
Canada—						
Wheat.....	2-02	381,677,700	1-89	364,857,000	1-83	536,730,000
Oats.....	0-78	331,357,400	0-80	317,097,000	0-57	307,121,400
Barley.....	1-00	77,378,670	1-37	77,462,700	0-92	60,408,600
Rye.....	1-49	12,728,600	1-40	14,240,000	1-53	18,727,800
Peas.....	2-99	12,899,100	2-86	9,739,300	2-22	8,204,100
Beans.....	5-41	19,283,900	4-48	6,214,800	4-06	5,825,000
Buckwheat.....	1-58	18,018,100	1-50	15,831,000	1-15	11,464,500
Mixed grains.....	1-14	40,726,500	1-36	37,775,400	1-28	40,211,000
Flax.....	3-13	18,951,000	4-13	22,609,500	2-38	25,631,000
Corn, husking.....	1-75	24,902,800	1-30	22,080,000	1-18	16,252,000
Potatoes.....	0-98	102,235,300	0-95	118,894,200	1-01	139,908,000
Turnips, etc.....	0-43	52,252,000	0-50	54,958,700	0-44	50,382,500
	per ton.		per ton.		per ton.	
Hay and clover.....	16-25	241,277,300	20-72	338,713,200	26-59	355,697,000
Grain hay.....	-	-	29-00	4,379,000	-	-
Fodder corn.....	6-15	29,439,100	6-92	34,179,500	7-65	41,366,000
Sugar beets.....	10-25	1,845,000	10-86	2,606,000	12-80	4,019,000
Alfalfa.....	17-84	7,963,500	21-85	10,800,200	23-86	14,717,000
Totals.....	-	1,372,935,970	-	1,452,437,500	-	1,636,664,900
P. E. Island—						
	per bush.		per bush.		per bush.	
Wheat.....	2-22	1,344,000	2-25	1,405,000	2-00	1,006,000
Oats.....	0-77	4,535,000	0-85	5,132,000	0-70	3,627,400
Barley.....	1-25	203,400	1-40	229,700	1-00	126,000
Peas.....	2-90	21,200	3-25	26,300	2-25	7,400
Buckwheat.....	1-44	175,500	1-50	132,000	1-00	112,500
Mixed grains.....	1-04	623,400	1-22	1,039,400	0-85	418,000
Potatoes.....	0-63	3,378,000	0-85	3,850,000	0-70	4,717,000
Turnips, etc.....	0-29	1,244,700	0-26	1,638,800	0-30	1,359,000
	per ton.		per ton.		per ton.	
Hay and clover.....	14-17	4,732,800	20-00	8,564,000	26-00	9,776,000
Fodder corn.....	9-00	19,800	8-00	50,000	10-00	15,000
Totals.....	-	16,277,800	-	22,067,200	-	21,164,300
Nova Scotia—						
	per bush.		per bush.		per bush.	
Wheat.....	2-36	1,718,000	2-33	1,314,000	2-25	1,150,000
Oats.....	1-06	5,727,000	1-14	6,519,000	0-70	3,531,000
Barley.....	1-62	562,000	1-77	768,000	1-10	351,000
Rye.....	1-85	14,200	1-55	45,000	1-80	12,600
Peas.....	3-20	106,000	3-84	146,000	2-25	51,700
Beans.....	7-34	1,050,000	6-37	554,000	4-50	383,000
Buckwheat.....	1-35	601,000	1-55	680,000	1-00	309,000
Mixed grains.....	1-30	254,000	1-53	334,000	1-50	311,000
Potatoes.....	0-93	9,092,000	1-09	10,891,000	0-98	10,005,000
Turnips, etc.....	0-58	5,406,000	0-60	9,773,000	0-62	5,338,000
	per ton.		per ton.		per ton.	
Hay and clover.....	20-00	17,560,000	22-34	31,835,000	35-00	33,180,000
Fodder corn.....	9-00	396,000	8-00	224,000	10-00	116,000
Totals.....	-	42,486,200	-	63,086,000	-	54,738,300

I. Preliminary Estimate of the Value of Field Crops in Canada, by Provinces, for 1920, as compared with the Final Estimates for 1918 and 1919—con.

Field Crops.	1918.		1919.		1920.	
	Per Bush.	Total.	Per Bush.	Total.	Per Bush.	Total.
	\$ cts. per bush.	\$	\$ cts. per bush.	\$	\$ cts. per bush.	\$
New Brunswick—						
Wheat.....	2-32	2,183,700	2-32	1,444,000	2-25	1,177,000
Oats.....	0-97	6,877,400	0-98	9,086,000	0-90	7,858,000
Barley.....	1-55	253,270	1-35	385,000	1-40	257,600
Rye.....	1-85	9,000	2-00	14,000	1-80	7,200
Peas.....	3-68	221,200	3-03	209,000	2-50	120,000
Beans.....	8-05	689,400	5-25	556,000	4-50	351,000
Buckwheat.....	1-65	2,477,000	1-36	2,547,000	1-50	3,161,000
Mixed grains.....	1-25	175,200	1-23	220,000	1-25	130,800
Potatoes.....	1-00	9,077,600	0-97	10,466,000	1-08	16,751,000
Turnips, etc.....	0-58	3,757,000	0-58	5,155,000	0-69	4,879,000
Hay and clover.....	15-30	16,998,300	20-26	22,512,000	27-87	24,294,000
Fodder corn.....	10-00	156,000	8-00	240,000	10-00	420,000
Alfalfa.....	9-00	16,200	—	—	—	—
Totals.....	—	42,891,270	—	52,834,000	—	59,405,800
Quebec—						
Wheat.....	2-28	14,382,000	2-38	10,010,000	2-25	9,367,000
Oats.....	1-00	52,667,000	1-06	60,712,000	0-80	57,354,000
Barley.....	1-62	7,373,000	1-64	8,764,000	1-20	6,067,000
Rye.....	2-10	991,000	2-00	1,156,000	1-80	922,000
Peas.....	4-14	6,889,000	3-62	4,435,000	2-25	2,396,000
Beans.....	5-72	10,679,000	4-52	3,856,000	4-00	2,940,000
Buckwheat.....	1-77	8,338,000	1-70	6,938,000	1-00	4,022,000
Mixed grains.....	1-46	7,659,000	1-50	6,384,000	1-50	6,669,000
Flax.....	3-74	310,000	3-91	434,000	2-85	559,000
Corn, husking.....	2-10	2,518,000	1-84	3,290,000	1-00	1,325,000
Potatoes.....	0-98	38,157,000	0-85	48,688,000	1-00	57,633,000
Turnips, etc.....	0-53	14,960,800	0-53	14,723,000	0-50	13,765,000
Hay and clover.....	15-75	107,098,400	20-54	132,462,000	20-09	155,527,000
Fodder corn.....	7-42	4,645,700	8-41	5,139,000	10-20	7,089,000
Alfalfa.....	11-70	109,000	14-22	953,000	21-00	1,428,000
Totals.....	—	276,776,900	—	307,944,000	—	327,063,000
Ontario—						
Wheat.....	2-06	31,401,000	1-97	40,701,000	1-93	43,674,000
Oats.....	0-78	102,212,000	0-91	71,378,000	0-63	79,808,000
Barley.....	1-06	25,809,000	1-32	17,215,000	1-00	16,762,000
Rye.....	1-55	2,818,400	1-48	3,279,000	1-65	4,069,000
Peas.....	2-24	5,338,700	2-31	4,180,000	2-20	5,185,000
Beans.....	4-66	6,464,500	3-79	1,039,000	4-00	1,820,000
Buckwheat.....	1-40	6,426,600	1-36	5,534,000	1-13	3,860,000
Mixed grains.....	1-09	29,823,900	1-35	26,672,000	1-25	30,073,000
Flax.....	3-41	670,000	3-48	450,500	2-50	633,000
Corn, husking.....	1-72	22,384,800	1-24	18,790,000	1-20	14,927,000
Potatoes.....	1-26	24,413,000	1-37	20,820,000	0-96	26,672,000
Turnips, etc.....	0-32	20,767,000	0-35	14,027,000	0-28	15,573,000
Hay and clover.....	16-50	75,848,000	20-61	115,161,000	24-30	108,621,000
Fodder corn.....	5-73	22,601,000	6-30	25,304,000	6-84	30,291,000
Sugar beets.....	10-25	1,845,000	10-86	2,606,000	12-80	4,019,000
Alfalfa.....	15-78	5,191,000	20-20	6,351,000	23-80	10,196,000
Totals.....	—	384,013,900	—	373,507,500	—	396,183,000
Manitoba—						
Wheat.....	2-06	99,274,000	1-92	78,706,000	2-00	75,758,000
Oats.....	0-71	38,676,000	0-72	41,420,000	0-56	31,483,000
Barley.....	0-89	24,887,000	1-17	20,137,000	1-00	18,040,000
Rye.....	1-41	5,549,000	1-28	5,228,000	1-65	3,985,000
Peas.....	—	—	2-08	170,000	2-00	120,000
Mixed grains.....	1-03	882,000	1-40	1,063,000	1-25	1,333,000
Flax.....	3-15	3,437,000	4-26	2,215,000	2-45	3,589,000
Potatoes.....	0-56	4,662,000	0-81	4,266,000	1-25	4,210,000
Turnips, etc.....	0-44	1,097,700	0-60	663,000	0-60	682,000

I. Preliminary Estimate of the Value of Field Crops in Canada, by Provinces, for 1920, as compared with the Final Estimates for 1918 and 1919—concluded.

Field Crops.	1918.		1919.		1920.	
	Per Bush.	Total.	Per Bush.	Total.	Per Bush.	Total.
	\$ per ton	\$	\$ cts. per ton	\$	\$ cts. per ton	\$
Manitoba—Con.						
Hay and clover.....	16-00	1,184,000	16-99	6,818,000	8-00	2,154,000
Fodder corn.....	18-50	713,000	13-28	1,520,000	10-00	761,000
Alfalfa.....	18-00	145,800	22-40	256,200	16-00	184,000
Totals.....	—	180,507,500	—	162,462,200	—	142,299,000
Saskatchewan—	per bush.		per bush.		per bush.	
Wheat.....	1-99	184,061,000	1-84	165,589,000	2-00	276,680,000
Oats.....	0-70	75,077,000	0-70	78,510,000	0-56	82,935,000
Barley.....	0-88	10,461,000	1-08	9,689,000	1-00	11,289,000
Rye.....	1-50	2,130,000	1-31	2,620,000	1-65	4,623,000
Peas.....	1-50	128,000	4-00	349,000	2-00	73,000
Beans.....	6-45	97,000	4-00	72,800	4-00	54,000
Mixed grains.....	1-10	541,000	1-40	1,079,000	1-25	769,000
Flax.....	3-10	13,036,000	4-14	18,589,000	2-45	19,566,000
Potatoes.....	0-96	6,672,900	0-89	10,013,000	1-25	8,576,000
Turnips, etc.....	0-91	2,005,000	1-12	4,022,000	0-94	2,959,000
	per ton.		per ton.		per ton.	
Hay and clover.....	11-92	4,319,800	17-00	4,743,000	10-00	3,283,000
Fodder corn.....	10-50	663,600	12-50	1,050,000	18-00	1,127,000
Alfalfa.....	17-50	169,800	27-50	506,000	20-00	472,000
Totals.....	—	299,362,100	—	296,831,800	—	412,406,000
Alberta—	per bush.		per bush.		per bush.	
Wheat.....	1-92	45,604,000	1-83	63,349,000	1-43	125,405,000
Oats.....	0-73	44,036,000	0-64	42,064,000	0-32	38,065,000
Barley.....	0-97	7,523,000	1-86	19,645,000	0-52	6,999,000
Rye.....	1-41	1,165,000	1-42	1,666,000	1-25	4,779,000
Peas.....	1-50	54,000	3-00	87,000	2-00	98,000
Beans.....	6-45	90,000	4-00	28,000	4-00	156,000
Mixed grains.....	1-15	692,000	0-83	783,000	1-00	258,000
Flax.....	3-12	1,498,000	4-15	921,000	1-50	1,284,000
Potatoes.....	1-11	3,462,500	0-83	6,840,200	1-00	7,138,000
Turnips, etc.....	0-66	1,555,900	1-06	2,934,900	1-00	3,219,500
	per ton.		per ton.		per ton.	
Hay and clover.....	15-82	6,307,400	20-89	9,956,200	20-00	9,972,000
Fodder corn.....	10-50	40,000	10-50	52,500	18-00	585,000
Alfalfa.....	21-50	1,044,900	29-16	1,254,000	24-00	1,075,000
Totals.....	—	113,072,700	—	149,580,800	—	199,033,500
British Columbia—	per bush.		per bush.		per bush.	
Wheat.....	2-09	1,710,000	2-34	2,339,000	2-25	2,513,000
Oats.....	1-00	1,550,000	1-07	2,276,000	1-00	2,460,000
Barley.....	1-47	307,000	1-82	630,000	1-60	517,000
Rye.....	2-07	52,000	2-08	229,000	2-05	330,000
Peas.....	3-00	141,000	2-60	137,000	2-50	153,000
Beans.....	4-20	214,000	3-75	109,000	4-00	121,000
Mixed grains.....	1-10	76,000	1-37	201,000	1-38	250,000
Potatoes.....	0-97	3,320,300	1-00	3,060,000	1-28	4,206,000
Turnips, etc.....	0-60	1,457,900	0-75	2,022,000	0-81	2,608,000
	per ton.		per ton.		per ton.	
Hay and clover.....	33-25	7,228,600	35-25	6,662,000	35-00	8,890,000
Grain hay.....	—	—	29-00	4,379,000	—	—
Fodder corn.....	10-00	204,000	12-00	600,000	17-75	962,000
Alfalfa.....	32-25	1,286,800	37-00	1,480,000	33-71	1,362,000
Totals.....	—	17,547,600	—	24,124,000	—	24,372,000

II. Preliminary Estimate of Total Value of Field Crops, by Provinces, 1920, as compared with Final Estimates for 1918 and 1919.

Province.	1918.	1919.	1920.
	\$	\$	\$
Prince Edward Island.....	16,277,800	22,067,200	21,164,300
Nova Scotia.....	42,486,200	63,086,000	54,738,300
New Brunswick.....	42,891,270	52,834,000	59,405,800
Quebec.....	276,776,900	307,944,000	327,063,000
Ontario.....	384,013,900	373,507,500	396,183,000
Manitoba.....	180,507,500	162,462,200	142,299,000
Saskatchewan.....	299,362,100	296,831,800	412,406,000
Alberta.....	113,072,700	149,580,800	199,033,500
British Columbia.....	17,547,600	24,124,000	24,372,000
Total for Canada.....	1,372,935,970	1,452,437,500	1,636,664,900

CONDITION OF FARM LIVE STOCK IN CANADA, DECEMBER, 1920.

Summarized from the Reports of Crop Correspondents.

Maritime Provinces.—The winter has been a fairly open one so far. Everywhere live stock went into winter quarters in good condition. With the exception of a few districts, fodder is good in the three provinces, and of sufficient quantity to last the winter through. In certain sections, where the fodder has proved of poor quality or of insufficient quantity, numbers of cattle will be sacrificed. In general, hay, though fairly plentiful, is high priced, one report quoting it as \$38 per ton.

Quebec.—The health of all live stock was good when entering winter quarters. There is a great quantity of straw from wheat, oats and barley, and the silos are well filled with corn. Thus, there will be sufficient feed to nourish stock during the winter months, notwithstanding the scarcity of hay.

Ontario.—All live stock are in thrifty condition, no disease being reported from any district. There is an abundant supply of straw, silage, roots and coarse grains; only hay is scarce and dear. However, a considerable saving was effected by the stock remaining out on grass so long in the autumn. The weather has been mild and very favourable for farm stock. The milk flow is good. Prices for all classes of animals are said to be declining.

Prairie Provinces.—Crop correspondents in the three Prairie Provinces report live stock to be in exceptionally good condition. The late rains were favourable for a good aftermath. Owing to the mild and open weather, the cattle were out on the ranges much later than usual, thus conserving the winter supply of fodder, which it is expected will be ample. In a few sections, where the crop was cut green, seed oats are scarce. Some straw was destroyed by rain. Correspondents report that farmers are greatly discouraged by the recent drop in the prices for grain, and some state that the prices have fallen below the cost of production, especially considering the

high cost of seed in the spring. Some farmers are endeavouring to reduce the number of live stock, but find the market dull and prices low. However, the season has been excellent on the whole. The supply of fodder and the condition of live stock are above the average.

British Columbia.—The weather has been mild and the snow late in coming, so that animals have been able to stay out at grass longer than usual. This has been a great help in saving fodder and in most districts the supply is adequate for the winter. The condition of all descriptions of live stock is good.

Grasshoppers in Saskatchewan, 1920.—The Saskatchewan Public Service Monthly of November, 1920, describes the successful efforts made last summer to avert the destruction by grasshoppers, which at the end of May threatened to assume very serious proportions. The grasshopper plague made its first appearance in south-eastern Saskatchewan, whence it spread to other parts of the province, altogether 39 municipalities becoming infested. An energetic poisoning campaign against the pest was organized by the Saskatchewan Department of Agriculture, at a total cost of \$63,981, including \$51,950 for 226 tons of poison bait, \$8,531 for hopper dozers, and \$3,500 for the salaries and travelling expenses of ten assistants. About 90,000 acres of growing crops, or 21 p.c. of the acreage infested, were destroyed, representing a gross loss of over \$1,700,000 in value to the farmers of the province. On the other hand, a conservative estimate of the crop acreage saved by the use of poison bait and hopper dozers is over 120,000 acres, representing a total saving in value of over \$2,200,000.

DOMINION EXPERIMENTAL FARMS AND STATIONS.

Central Farm, Ottawa.—The temperatures recorded during November, which have been exceptionally even, have ranged a little lower than usual, the mean figuring out to be 30·80 as compared with 31·30 for the corresponding month in 1919 and an average mean of 32·12 for the previous five years. The highest reading of the thermometer is 51 and the lowest 11·7, as against extremes of 58 and 4·4 a year ago and an average maximum of 56·6 and an average minimum of 3·9 for November from 1915 to 1919. The precipitation, made up of 1·36 inch of rain and 0·39 of an inch of melted snow, totals 1·75 inch, compared with 2·71 inches for this time last year, made up of 2·19 inches of rain and the balance of melted snow; while 1·91 inch represents the average for November for the previous five years. The bright sunshine averages 1·7 hour a day, as against 1·6 hour last year and an average of 3 hours for the five years from 1914 to 1919.

At the Ottawa Farm, the Poultry Division, in addition to starting on November 1, 1920, its second Dominion Egg-laying Contest,

inaugurated on the same date a similar contest open to competitors from the province of Ontario alone.

Charlottetown, P.E.I.—J. A. CLARK, Superintendent, reports:—"The first ten days of November were mild, with scarcely any frost, and the thermometer reached as high as 60. Ploughing was discontinued on the 12th, and, while the remainder of the month has been cool, the lowest temperature is 18 and the mean is above freezing. A heavy fall of snow on the 24th made very fair sleighing, which has continued until the close of the month. The open autumn made it possible to complete practically all of the Station's fall work, and the cattle have gone into winter quarters in good shape. The rainfall, which aggregates only a little over two inches, came in small showers on fourteen different days. Owing to the continued drought, many farm wells have gone dry, and the streams are so low that saw-mills and grist-mills are either shut down for want of water or are working only part time. This year's splendid potato crop has been largely shipped out of the province during the continued dry weather. At the Experimental Station, a wagon shed has been completed, and other necessary repairs have been made."

Kentville, N.S.—W. S. BLAIR, Superintendent, reports:—"On the whole, the weather during November has been quite pleasant, with a mean temperature of 35.65, as compared with an average November mean of 36.94 for the previous six years. Although the mean has been lower than usual, no severe frost has been recorded and, with the exception of four days, ploughing has been possible practically all through the month. The precipitation aggregates 3.30 inches, made up of 3 inches of rain and 0.30 of an inch of melted snow. The sunshine recorded during the month is above normal, amounting to 101.05 hours, as compared with an average of only 83.12 hours for the corresponding period from 1914 to 1919."

Nappan, N.S.—W. W. BAIRD, Superintendent, reports:—"Except for ploughing operations having had to be curtailed on account of a rather early freeze-up, conditions during November have been almost ideal for the farmer. The highest temperature registered is 60, the lowest 10 and the mean is 31.79; while, for the corresponding time from 1913 to 1919, the average figures are 59 for the maximum, 9 for the minimum and 35.20 for the mean temperature. Showers have been recorded on six different days, giving a rainfall of 1.48 inch, which, with a snowfall of 7 inches on the 23rd, gives a total precipitation of 2.18 inches; while the average November figures for seven previous years are 3.60 inches. The bright sunshine totals 111.2 hours, as compared with 83.7 hours for the seven-year period referred to. In this district, root crops were successfully harvested early in the month. Since the snowfall on the 23rd, there has been excellent sleighing. There was started at the Experimental Farm, on November 1, the second Dominion Egg-laying Contest for Nova Scotia, twenty-two pens being entered. Twenty-five grade Shorthorn steers have been purchased locally by the Nappan Farm for experimental feeding work this winter."

Fredericton, N. B.—W. W. HUBBARD, Superintendent, reports:—"The temperatures recorded during November average about four degrees lower than a year ago, and work on the land had to be discontinued a week earlier than then, which, in many cases, has meant that roots have been left to freeze in the fields. There was heavy frost on the 9th, since when no mild spell has been experienced, the thermometer dropping to 7 on the 30th. Live stock had to be stabled on November 9, and winter rations resorted to. In this district, the scarcity of help and the early setting in of winter have resulted in a good deal of land remaining unploughed which otherwise would have been attended to."

Ste. Anne de la Pocatière, Que.—JOS. BEGIN, Superintendent, reports:—"November has been colder and drier than the average for the last few years. The highest temperature recorded during the month is 51 and the lowest 5, while the mean is 27.30—compared with a maximum of 58 and a minimum of 21.6 and a mean of 35.1 for the corresponding period of last year. The precipitation, made up of 0.55 of an inch of rain and 5 inches of snow, totals 1.05 inch, which is much less than usual. The bright sunshine averages 3 hours a day, which is more than double that of November, 1919. Owing to frost, work on the land had to be discontinued after the first week of the month, with the result that considerably less ploughing than usual has been accomplished this fall. Live stock has been taken in for the winter two weeks earlier than usual. The prospects for a very long feeding season, together with the shortage of hay and high price of feeds, are causing many farmers to market unfinished stock and young animals that would otherwise be retained. Lambs, in particular, are being disposed of at rather low prices."

Cap Rouge, Que.—G. A. LANGELIER, Superintendent, reports:—"November has been brighter and colder, with less rain and more snow, than the average for this period during the previous eight years, the figures being, respectively, 27.12 and 30.45 for mean temperatures, 1.13 and 2.11 inches for rainfall and 9.40 and 8.18 inches for snowfall and 61.2 and 59.9 hours for sunshine. Winter came on very suddenly, with a five-inch snowfall on the 12th, when sleighs, which have continued in use since, replaced wheels. Of late, roads have been in first-class shape for hauling, and farmers are taking advantage of them to market hay and produce."

Lennoxville, Que.—J. A. McCLARY, Superintendent, reports:—"On the whole, the weather during November has been fine, the mean temperature being 29.94 as against 32.14 a year ago, and the precipitation amounting to 2.65 inches, as compared with 2.74 inches in 1919. Conditions have been favourable, not only for fall ploughing and other outside work, but also as regards live stock, and the open weather has resulted in quite a little saving in feed. In many instances farmers are disposing of their surplus stock at rather a sacrifice, as the market for unfinished animals is weak."

Brandon, Man.—W. C. McKILLCAN, Superintendent, reports:—"November has been about normal as regards temperature, and

only 5 inches of snow have been recorded. Ploughing was general during the first week of the month, after which the ground froze up. During practically all of November it has been possible to leave live stock outside during the day-time, which, naturally, has tended to conserve the winter's feed supply. Fall ploughing made good progress until severe weather set in, and more of this work than usual has been performed. Many farmers have been delivering wheat and returning with feed."

Indian Head, Sask.—N. D. MACKENZIE, Superintendent, reports:—"On account of the continued open weather, with practically no snow, which has prevailed up to the close of November, all live stock in this district will be fed much more cheaply than usual of late years, as there is an abundance of feed in the stubble, which is still available for stock, and, for the remainder of the winter, the feed problem should be much less serious than usual. Owing to the low prices of cereals and particularly of feed grains, very little marketing is being done and it is almost impossible to purchase locally."

Rosthern, Sask.—WM. A. MUNRO, Superintendent, reports:—"Rains during September and October promoted strong growth in hay and stubble land, and this condition, followed by almost no snow and an average temperature of about twenty-five degrees for the whole of November, has made it possible for stock to go into winter quarters in unusually good condition. The open fall has eased off the situation as regards feed, of which there is now abundance for the coming winter. A pump-house, 24 by 30 feet, has been erected at the Experimental Station. This is intended to hold two large air-pressure tanks, besides the pumping machinery. A small structure, containing a feed room, 20 by 30 feet, has been placed alongside the silo; and the Station has purchased twenty steers, which are to be put under an experiment in the feeding of sunflower ensilage."

Scott, Sask.—M. J. TINLINE, Superintendent, reports:—"Comparatively mild weather has prevailed throughout the month, but, owing to several foggy days, the bright sunshine totals only 87·8 hours, which is the least ever recorded at this Station during November. In most districts, threshing has been completed and much of the late threshed grain has graded as tough, with the result that farmers marketing their crop at this time have to sell at unprofitable prices. There is an abundance of feed in most sections, and, owing to the absence of snow, live stock running at large is fattening up rapidly."

Lacombe, Alberta.—F. H. REED, Superintendent, reports:—"November, with its many mild days and absence of snow, has been almost an Indian summer month. Only during the nights of the 11th, 12th and 13th has the temperature gone below zero, while it has been thawing at noon about every other day. After covering the distance of thirty miles in three days, the Station flock of some 850 sheep was got in from the range in prime condition. Prices having slumped during the month, farmers in this district are not selling to any

extent, and, consequently, it is impossible to purchase, at market quotations, such feeds as hay, barley and oats. While there is little demand for horses or beef cattle, many are in the market for dairy cattle and breeding swine, which are commanding good prices."

Lethbridge, Alberta.—W. H. FAIRFIELD, Superintendent, reports:—"The weather during November has been milder than usual, and also extremely dry, only 0.06 of an inch of precipitation being recorded. Those operating irrigated farms have been able to do some ploughing where the land has been fall-irrigated, but on dry land it has been impossible to do any such work on account of the extreme drought. The rainfall registered since the end of July has been very much less than normal and the soil, in consequence, is extremely dry. The mild spell has been particularly favourable for live-stock men, as it has been unnecessary to feed; and the reflection of this has been felt in the hay market, the price of alfalfa having weakened perceptibly during the month. All kinds of range stock are looking well; in fact, conditions are now the exact reverse of what they were a year ago, when the hay shortage was beginning to be felt.

Invermere, B.C.—R. G. NEWTON, Superintendent, reports:—"With the exception of a cold snap during the earlier part of the month, when the thermometer dropped gradually to -3, the weather during November has been exceptionally fine and mild—the mean temperature being 28.5, as against 22.30 a year ago, and the bright sunshine 78.6 hours, as compared with 49.2 hours in 1919. The precipitation, consisting practically altogether of rain, amounts to 0.18 of an inch, which is the least on record here. Conditions have been ideal for fall work of all kinds."

Summerland, B.C.—R. H. HELMER, Superintendent, reports:—"The weather during November has been comparatively mild, and farm work has progressed very well. The highest temperature is 52, recorded on the 3rd, and the lowest 19, registered on the 12th. So far, little or no feeding has been required by live stock. Up to the close of the month, there has been no snow experienced here, and, at the Station, the land is still being ploughed and levelled for irrigation. Roads are in fair condition, and, in the district, cordwood is being cut for next year. The soil is in a promising condition as regards moisture, and dry-farming sections are hopeful of good crops in 1921. Snow is needed now to fill reservoirs in the hills to provide next year's water supply."

Agassiz, B. C.—W. H. HICKS, Superintendent, reports:—"Weather conditions during November have been somewhat better than those which prevailed during the two previous months. From October 29 to November 13, no rain was recorded, the fine spell affording an excellent opportunity for completing the deferred harvesting of roots and potatoes. From the 13th to the 27th, rain fell every day, giving a total of 4.8 inches for the month. This is the lowest November precipitation since 1905, which is not surprising after the wet spell during September and October. A peculiar feature about the minimum temperature of 25 for the month, is that

this minimum has been the same now for three years in succession. There has been no severe frost as yet, this fall. The live stock in the district is in fair condition. Dairy and poultry products are commanding good prices."

Sidney, Vancouver Island, B.C.—LIONEL STEVENSON, Superintendent, reports:—"Wet weather has continued throughout November. Some difficulty has been experienced in the harvesting of roots, corn, and potatoes, while very little autumn seeding has been done. Considerable work in the way of land clearing and autumn ploughing and in the seeding of wheat and vetches has been accomplished. Autumn pastures on the upland areas have been good, and the live stock of the district is doing well. The harvesting of the orchard fruits has been completed. Peas have yielded well, while apples have given approximately one-third of an average crop. The soil has been too wet to permit of the planting of stockings and seed of the various field root and garden vegetables seed crops. Considerable planting of flowering bulbs was attended to during the early part of the month. More land drainage has been done throughout the district than is usual for November. All live stock has been in good demand.

Meteorological Record for November, 1920.

The records of temperature, precipitation and sunshine at the Experimental Farms and Stations for the month of November are given in the following table:—

Experimental Farm or Station at	Degrees of Temperature F.			Precipitation in inches.	Hours of Sunshine.	
	Highest.	Lowest.	Mean.		Possible.	Actual.
Ottawa, Ont.....	51.00	11.70	30.80	1.75	285	50.5
Charlottetown, P.E.I.....	60.00	18.00	32.90	2.21	281	83.1
Kentville, N.S.....	63.00	15.00	35.65	3.30	287	101.5
Nappan, N.S.....	60.00	10.00	31.79	2.18	285	111.2
Fredericton, N.B.....	59.50	-7.00	29.30	1.48	284	108.4
Ste. Anne de la Pocatière, Que.....	51.00	5.00	27.30	1.05	280	89.4
Cap Rouge, Que.....	47.00	3.20	27.12	2.07	280	61.2
Lennoxville, Que.....	53.00	6.00	29.94	2.65	286	41.3
Brandon, Man.....	51.00	1.00	23.40	0.95	272	81.7
Indian Head, Sask.....	48.00	-8.00	50.40	0.54	270	49.5
Rosthern, Sask.....	46.60	2.40	24.96	0.18	255	94.7
Scott, Sask.....	51.20	-4.20	23.90	0.36	261	87.8
Lacombe, Alberta.....	59.30	-6.10	25.54	0.01	263	94.1
Lethbridge, Alberta.....	56.00	-10.00	31.20	0.06	273	103.1
Invermere, B.C.....	56.00	-3.00	28.50	0.13	270	78.6
Summerland, B.C.....	52.00	19.00	38.30	0.70	272	86.5
Agassiz, B.C.....	61.00	25.00	46.01	4.80	274	75.9
Sidney, Vancouver I., B.C....	56.00	31.00	43.70	3.32	276	84.2

OTTAWA, December 20, 1920.

E. S. ARCHIBALD,
Director Experimental Farms.

CROP REPORTS FROM OTHER COUNTRIES.

England and Wales.—The Ministry of Agriculture reports (December 1) that November was a very favourable month for work on the land, and very good progress was made with autumn cultivation and sowing in all parts of the country. Field work

generally is now well forward, though in some districts, where the completion of the harvest was much delayed, all the arrears have not yet been overtaken, and autumn sowing was late. Much cleaning of the land has been done, and the soil has been in good condition for cultivation as a rule, though some heavy soils in the western counties have worked rather stiffly, and in the east a good tilth could not be obtained in some cases on heavy land as it was too hard and dry. On the whole, however, autumn grain has been drilled into a good seed-bed. Early sown wheat, oats and beans are good plants and look well, and the later sown are coming up evenly in most districts, but a fairly large proportion is not yet showing. Potatoes have been lifted under very favourable conditions and have been stored clean and dry. The tubers are however small on the whole and of very variable quality, there being a good deal of disease in many districts, especially in the southwest and in Wales. The yield per acre over the whole country is estimated at 5 4-5 tons per acre, or two-fifths of a ton under the ten-year average, but the total crop, owing to the increased area, is estimated at 3,137,000 tons, or 400,000 tons more than last year. The keeping qualities of this year's crop are however not expected to prove so good as last year's, when potatoes were exceptionally free from disease. The yield is estimated at 19 tons per acre, which is equal to the average of the last ten years. The total production of 7,292,000 tons is 1,000,000 tons greater than in 1919. The yield of turnips and swedes is estimated at 14 2-5 tons per acre, or 1 4-5 tons above average, and the total production at 14,200,000 tons, or 3,000,000 tons more than last year.

Scotland.—The Board of Agriculture reported (December 1) that the weather during the greater part of November was dry and mild on the mainland of Scotland, but in the Western Islands it was very boisterous, and heavy rain was frequent. The conditions were very favourable for outdoor work, and good progress was made with autumn cultivation. Notwithstanding the late start made in many districts, the sowing of wheat is well forward generally, and is completed in Moray and central Perth, the seed being sown in good order. Stubble ploughing is in arrear in many parts, owing to the late and protracted harvest.

New Zealand.—The Government Statistician estimated (November 4) that the area sown to wheat for the season 1920-21 is 213,900 acres, as against 142,387 acres for 1919-20, and to oats 468,700 acres, as against 516,005 acres.

Argentina.—A cablegram received from the Canadian Trade Commissioner at Buenos Aires on December 16, 1920, reports the following as the estimated yields in Argentina for the crop season 1920-21: Wheat 6,070,000 metric tons (223,034,000 bushels); oats 830,000 metric tons (53,819,000 bushels); flaxseed 1,400,000 metric tons (55,115,000 bushels). The corresponding final estimates for the season of 1919-20 were: Wheat 214,142,000 bushels, oats 53,754,000 bushels and flaxseed 42,039,000 bushels.

FIELD CROPS OF THE UNITED STATES, 1920.

The Crop Reporting Bureau of the United States Department of Agriculture issued (December 17, 1920) the following estimates of the acreage, production and value of the principal farm crops in the United States for the years 1919 and 1920, as compared with the annual average for the five years 1914-1918.

Field Crops	Area	Production		From Value Dec. 1	
		Per acre	Total	Per acre	Total
	000 acres	bush.	000 bush.	cents	000 \$
Corn.....1919	100,072	28.6	2,858,509	134.9	3,851,741
1920	104,601	30.9	3,232,367	67.7	2,189,721
Average.....1914-18	107,225	25.7	2,760,484	94.6	2,612,389
Winter Wheat.....1919	49,105	14.9	729,503	210.9	1,538,292
1920	37,993	15.3	580,513	149.3	866,741
Average.....1914-18	35,282	16.0	563,498	145.5	819,782
Spring Wheat.....1919	23,203	8.8	204,762	230.1	471,115
1920	19,419	10.8	209,365	130.6	273,465
Average.....1914-18	18,837	13.7	258,748	147.0	380,396
All Wheat.....1919	72,308	12.9	934,265	215.1	2,009,407
1920	57,412	13.7	789,878	144.3	1,140,206
Average.....1914-18	54,119	15.2	822,246	146.0	1,200,178
Oats.....1919	41,835	29.4	1,231,754	71.5	880,296
1920	43,323	35.2	1,524,055	47.2	719,782
Average.....1914-18	41,773	33.9	1,414,558	54.7	773,332
Barley.....1919	7,198	22.4	161,345	121.0	195,299
1920	8,083	25.0	202,024	70.7	142,931
Average.....1914-18	8,229	26.1	214,819	80.1	172,084
Rye.....1919	7,103	12.5	88,909	134.5	119,595
1920	5,043	13.7	69,318	127.8	88,609
Average.....1914-18	3,918	15.3	59,933	128.2	76,852
Buckwheat.....1919	739	20.6	15,244	146.9	22,397
1920	729	18.9	13,789	129.1	17,797
Average.....1914-18	868	17.6	15,305	119.8	18,331
Flaxseed.....1919	1,572	4.9	7,661	438.3	33,581
1920	1,785	6.2	10,990	176.6	19,413
Average.....1914-18	1,680	7.7	12,922	232.0	29,984
Rice.....1919	1,092	39.2	42,790	266.8	114,152
1920	1,337	40.2	53,710	118.9	63,837
Average.....1914-18	893	37.4	33,360	134.5	44,859
Potatoes.....1919	3,981	89.8	357,542	160.8	574,764
1920	3,929	109.6	430,458	116.4	500,974
Average.....1914-18	3,938	97.0	382,113	98.1	375,017
Sweet Potatoes.....1919	1,042	101.2	105,405	133.5	140,706
1920	1,085	103.6	112,368	112.7	126,629
Average.....1914-18	793	94.6	74,983	96.1	72,039
Hay, tame.....1919	56,552	1.62	91,883	\$20.09	1,846,083
1920	57,915	1.57	91,193	17.70	1,613,896
Average.....1914-18	53,386	1.53	81,430	13.96	1,136,580

Field Crops	Area	Production		From Value Dec. 1	
		Per acre	Total	Per acre	Total
	000 acres	bush.	000 bush.	cents	000 \$
Sugar beets.....1919	692	9.27	6,421	11.74	75,420
1920	882	9.69	8,545	11.63	99,396
Average.....1914-18	604	10.02	6,051	6.92	41,843
		lbs.	000 lbs.	per lb.	
Tobacco.....1919	1,921	761.8	1,463,325	38.9	569,608
1920	1,894	796.1	1,508,064	19.8	298,001
Average.....1914-18	1,434	828.1	1,187,708	18.0	214,015

The values in the above table are based on the prices paid to farmers on December 1, 1920.

PRODUCTION OF AGRICULTURAL IMPLEMENTS, 1919.

A preliminary report by the Dominion Bureau of Statistics covers the operation during the calendar year 1919 of 86 plant manufacturing agricultural implements in Canada. Of these plants 2 are in Prince Edward Island, 20 in Quebec, 51 in Ontario, 7 in Manitoba, 3 in Saskatchewan, and 3 in Alberta.

The agricultural implements manufactured and their selling value at the works are classified as follows:

Classes of Products.	Quantity.	Selling value at works.
	No.	\$
Drills, grain.....	27,912	3,560,631
Cultivators, wheeled and other.....	41,149	1,378,526
Harrows, disc, spring and spike tooth.....	83,746	1,452,463
Ploughs, all kinds.....	70,372	3,255,773
Ploughs, tractor.....	4,170	742,250
Harvesters, grain.....	29,949	5,169,075
Harvesters and threshers combined.....	660	340,083
Hay carriers.....	4,270	274,040
Hay loaders.....	5,557	475,493
Hay tedders.....	670	34,005
Hay rakes, horse.....	15,375	566,735
Mowers.....	28,019	1,777,358
Threshers.....	5,691	3,071,078
Fanning mills.....	7,266	291,902
Tractors.....	1,827	865,063
Choppers, pulpers, etc.....	6,447	246,144
Manure spreaders.....	5,715	1,093,080
Cream separators.....	3,291	203,220
Engines, steam.....	103	198,244
Engines, gas.....	633	187,555
Wheel barrows.....	11,384	61,689
Castings and machinery parts.....	-	1,044,592
All other miscellaneous products.....	-	6,303,033
Custom work and repairs.....	-	4,111,911
Total selling value.....	-	36,703,943

The total value of the capital invested in the industry in 1919 was \$83,276,450, and the total selling value of the products was \$36,-703,943. The number of employees was 10,808, including 566 females, and the salaries and wages paid amounted to \$11,858,013.

AGRICULTURE DURING TWO GREAT WARS.

To the Journal of the British Ministry of Agriculture for June, 1920, Lord Ernle, who is recognized as an authority on agricultural history, contributes an interesting article entitled: "Agriculture during two Great Wars: 1793-1815 and 1914-18." Whilst showing the points of resemblance between the economic effects of both wars, he emphasizes one great contrast as regards the agricultural industry, viz., that whereas during the Napoleonic war agriculture was allowed to reap the benefits of the conditions by which the value of its products was enhanced, in the recent struggle the control of prices, the rationing of food and the bread subsidy to all consumers at the national expense operated to restrict the profits of farmers. In the recent war, patriotism made as strong an appeal as the pocket. "The great exertions," states Lord Ernle, "made by home producers in the face of unexampled difficulties were all the more creditable, because throughout the latter part of the German war so much more was done for consumers than for producers. The laws of supply and demand, which in the last 40 years have been strictly enforced so long as they favoured consumers, have been set aside as soon as they favoured producers. Not unreasonably that has been a sore point with farmers." Wheat at Michaelmas, 1795, the article points out, stood at 92s. per quarter (\$2.80 a bushel); at the following Lady Day it had risen to 96s. (\$2.92 a bushel). "In 1793, when revolutionary France put over a million of men into the field, our land forces amounted to 43,000 men in Europe and 10,000 in India. In 1914 the total regular army of the United Kingdom amounted to something like 250,000 of all ranks, with which to stem the rush of the disciplined millions of Germany. At both periods we warmed to our work. In 1813, our Regulars and embodied Militia in Europe and India numbered 381,000. In the German war, if we measured our victories in trench warfare by the yard, we numbered our forces by the million. By the end of 1918, a total of 5,750,000 men of all ranks had passed into the armies of the United Kingdom. In this number and in the naval forces were included something like a third of the most able-bodied agriculturists of Great Britain, and there were many more who were drawn away from the land into other forms of civilian employment. With the reduced supply of skilled labour, the increased output of food which farmers succeeded in making was at once a notable achievement and a valuable contribution to victory." Lord Ernle concludes: "If higher wages and shorter hours mean greater efficiency the industry will prosper; if they do not, the industry cannot thrive, or even exist, except under conditions which restrict employment. It rests with the men and their leaders. Unless a new earth is created there can be no new heaven to inherit."

RATE OF SEEDING AS AFFECTING THE YIELD OF WHEAT.

In the course of an address at the Cardiff meeting of the British Association for the Advancement of Science, given on August 24th last, Sir Daniel Hall, K.C.B., F.R.S., referred to the possibility of effecting a considerable saving by sowing wheat more thinly than is at present the custom. He stated that in the ordinary way in Great Britain "wheat is sown at the rate of about $2\frac{1}{2}$ bushels to the acre, and the average yield is about 32 bushels, or a thirteenfold yield. Now an isolated wheat plant is capable of giving a hundredfold, or even a thousandfold yield, and the question is often raised of whether we are not sowing an unnecessary amount of seed. If we examine the plants along the drill line in a wheat field we find that though there may be gaps there are a great number of spots where the seeds have come up too thickly and are combating with one another to the detriment of the crop. Experiments are in hand for the improvement of the spacing of the wheat seed, and it is claimed that with a suitable machine a perfectly effective seeding can be attained with as little as a bushel to the acre. Even if we could reduce the amount of seed used by one bushel an acre the country would gain 3 p.c. on its output of wheat, worth well over £1,000,000 a year at the present time." Applying these considerations to Canada, where the average rate of wheat seeding is $1\frac{3}{4}$ bushel for the whole Dominion, but where the area sown to wheat is about 18 million acres, as against about 2 million acres in Great Britain, the saving of $\frac{3}{4}$ of a bushel in seeding would represent a total of $13\frac{1}{2}$ million bushels, worth at present prices about 27 million dollars annually. The same considerations would apply to other cereals. To quote further from Sir Daniel's address: "The population of the world is rapidly growing up to, if it has not for the moment exceeded, its available supply, and only by research and by the wide utilization of the fruits of that research can we obtain the greater supply of food that the world needs."

COLLECTION OF AGRICULTURAL STATISTICS IN IRELAND.

Presumably owing to the disturbed political conditions in Ireland it proved impracticable for the year 1920 to obtain particulars of crops and live stock on all farms in Ireland, in accordance with the plans previously followed. The preliminary statement issued by the Irish Department of Agriculture on October 15, 1920, describes the method adopted for obtaining reliable estimates in the absence of returns from all farmers as follows:

Very large numbers of farmers of every class in every district in Ireland—farmers whose signed returns for June 1, 1919, were known to be reliable—were called upon to furnish through the post signed returns of their crops and live stock on June 1, 1920. The response was exceedingly generous, in fact the Department received far more returns than were necessary for the purpose in view. Each return for 1920

was compared with the corresponding return for 1919. About 10 per cent of the pairs of returns had to be discarded as being non-comparable owing to changes in areas of holdings, etc. The remaining returns for 1920 were summarized for each county and also the corresponding returns for 1919, separate summaries being made for small, medium-sized and large holdings. From these summaries was calculated the percentage change from June 1, 1919, to June 1, 1920, in the area under each crop and in the number of each class of live stock in each county. These percentage changes for each county were assumed to have been general for all farms in that county and were applied to the total figures for crops and live stock in 1919 in that county.

This method of using "sample" returns has to be adopted when all returns were not available. The "sample" in this instance was very large and the holdings of each class and in each district were well represented. The sample was much smaller in some counties than in others, but was large enough in each county to yield reliable estimates. The figures issued are based on a 20·1 sample, *i.e.*, on a comparison of the changes that took place on 20·1 p.c. of the holdings over 1 acre. A careful scrutiny of the changes from 1919 to 1920 was made at each step in the process of summarizing, and it was found that in each county the changes in each batch of farms summarized were almost always in the same direction and were much the same in degree. It was also found that a 10 per cent sample gave practically the same results as a 20 per cent sample. A 5 per cent sample would have indicated the principal changes. The estimates based on a 20·1 per cent sample are accordingly regarded as quite reliable."

This statement is of interest to readers of the Monthly Bulletin, because the plan described for the estimation of Irish agricultural statistics is similar in principle to that now adopted for collection of the annual agricultural statistics of Canada. The cardboard schedules, collected annually through the rural school teachers and children, are in effect "sample returns" from which totals are estimated for each county or crop district according to the proportion between the number of completed schedules received and the total number of farms. In Ireland the sample returns in 1920 were used to ascertain the percentage difference in the areas of crops and the numbers of live stock between the same farms in the two years, the percentages when ascertained being then applied for the purpose of estimating the totals. It will be noted that the Irish estimate is based upon changes that took place in 20 per cent of the holdings. In the Canadian estimates the number of returns varied from 13 per cent in Ontario to 60 per cent in British Columbia. It is obvious that the higher the percentage of returns the more reliable are the estimates of the totals based thereon.

DISEASES OF ANIMALS IN GREAT BRITAIN.

The recently issued report for 1919 of the Chief Veterinary Officer of the British Ministry of Agriculture and Fisheries contains statistics of the outbreaks of the contagious diseases of animals over long periods. The figures reveal substantial progress in the control of animal diseases, and the reduction shown in the number of outbreaks must be a source of gratification both to those who administer the Diseases of Animals Acts and also to stockowners throughout the country. Of the more virulent diseases no outbreak of cattle plague has been reported since 1877, whilst pleuro-pneumonia, of which in the seventies the out-

breaks numbered upwards of 2,000, has been extinct in the British Isles since 1890. Foot-and-mouth disease breaks out occasionally; but as a rule is speedily eradicated. In 1883 there were as many as 18,732 outbreaks. During recent years the outbreaks have numbered in 1916, one; in 1917, none; in 1918, three; and in 1919, 75. Glanders, of which in 1904 there were 1,529 outbreaks, is now on the point of eradication, for the number of outbreaks in 1919 was only 25, with 61 horses attacked, including re-actors to the mallein test. Rabies, which during the years 1903 to 1917 was entirely suppressed, has reappeared in 1918 with 98 cases and in 1919 with 150 cases. In 1919 there were happily no deaths from hydrophobia, although 179 persons were reported as bitten by animals in the scheduled area, of whom 46 were bitten by rabid animals.

The following comparative table shows the number of outbreaks and the number of animals attacked for each disease in Great Britain during the four years 1916 to 1919:—

Disease.	1916.		1917.		1918.		1919.	
	Out-breaks.	Animals attacked.	Out-breaks.	Animals attacked.	Out-breaks.	Animals attacked.	Out-breaks.	Animals attacked.
Foot-and-mouth...	1	24	—	—	3	14	75	3,463
Glanders.....	46	117	25	63	24	98	25	61
Sheep scab.....	424	—	543	—	352	—	438	—
Anthrax.....	571	687	421	480	245	282	234	314
Swine fever.....	4,331	9,168	2,104	870	1,407	562	2,305	1,039
Parasitic mange in horses.....	2,147	4,689	2,614	4,873	4,483 cases.	8,422	5,003 cases.	9,773
Rabies.....	—	—	—	—	98	—	150	—

Owing to the war the Parasitic Mange Order of 1911 was suspended from August 6, 1914, to March 27, 1915, and as a consequence the disease spread and the number of outbreaks reported rose considerably. The outbreaks of swine fever or hog cholera, though still numerous, are considerably less than they were six or seven years ago. In 1914 there were no less than 4,356 outbreaks, with 39,277 swine slaughtered. In 1919 the outbreaks were 2,305, with only 1,039 slaughtered.

THE WEATHER DURING NOVEMBER.

The Dominion Meteorological Office reports that the temperature was above the average from the British Columbia coast to the boundary of Manitoba. In Ontario it was from average to 2° below, in Quebec from 1° to 3° below, and in the Maritime Provinces from 2° to 4° below. The chief positive departures were experienced in parts of Alberta and Saskatchewan and varied from 6° to 7°. The precipitation was above the average over most of that part of Ontario

south and east of lake Huron and the Georgian bay to the boundary of the province, also very locally above in Manitoba, otherwise over the Dominion it was below the average. In British Columbia the deficiency varied from three inches in parts of Vancouver island to three and six-tenths of an inch in the interior of the province. In the western provinces the amount was nearly everywhere much below the normal. In northern Ontario it fell short of the usual quantity by from half an inch to an inch and a half; in Quebec by from half an inch to an inch, and in the Maritime Provinces from three-quarters of an inch to an inch and three-quarters. At the close of the month Barkerville in northern British Columbia reported 14 inches of snow on the ground; in the western provinces Winnipeg and Minnedosa 6 inches; in Ontario a few inches in some places, chiefly in northern districts; in Quebec, from 2 to 9 inches; in the Maritime Provinces a few inches in some localities, more especially in northern New Brunswick and in Prince Edward Island.

PRICES OF AGRICULTURAL PRODUCE.

I. Weekly Range of Cash Prices per bushel of Canadian Grain at Winnipeg and Fort William, 1920.

(SOURCE: Board of Grain Commissioners for Canada.)

Grain and Grade.	Nov. 6.		Nov. 13.		Nov. 20.		Nov. 27.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat—								
No. 1 Nor.....	2 15½	— 2 31	2 00½	— 2 12½	1 98	— 2 11½	1 79½	— 1 95½
No. 2 Nor.....	2 14½	— 2 30½	1 99½	— 2 11½	1 97	— 2 10½	1 77	— 1 94½
No. 3 Nor.....	2 10½	— 2 25½	1 96½	— 2 08½	1 94	— 2 07½	1 74	— 1 91
No. 4.....	2 03	— 2 17	1 89½	— 2 01½	1 89	— 2 02½	1 74½	— 1 86
No. 5.....	1 92	— 2 06½	1 78½	— 1 90½	1 79	— 1 92½	1 64	— 1 76
No. 6.....	1 82	— 1 96	1 68½	— 1 80½	1 69	— 1 82½	1 49	— 1 66
Oats—								
No. 2 C.W.....	0 66½	— 0 69	0 62½	— 0 66½	0 54½	— 0 64½	0 53½	— 0 57½
No. 3 C.W.....	0 60½	— 0 62	0 56½	— 0 60½	0 51½	— 0 59	0 50½	— 0 53½
No. 1 feed ex.....	0 60½	— 0 62	0 55½	— 0 60½	0 50½	— 0 58	0 49½	— 0 52½
No. 1 feed.....	0 58½	— 0 60½	0 53½	— 0 57½	0 47½	— 0 55½	0 46½	— 0 49½
No. 2 feed.....	0 57½	— 0 55½	0 50½	— 0 54½	0 44½	— 0 52	0 43½	— 0 46½
Barley—								
No. 3 C.W.....	1 16½	— 1 21	1 07	— 1 18½	0 85	— 1 12	0 83½	— 0 92½
No. 4 C.W.....	1 05½	— 1 11½	1 02	— 1 07½	0 75	— 1 04	0 73½	— 0 78½
Rejected.....	0 84½	— 0 91	0 81	— 0 87½	0 67½	— 0 82½	0 66½	— 0 70½
Feed.....	0 84½	— 0 91½	0 81	— 0 87½	0 67½	— 0 82½	0 66½	— 0 70½
Flax—								
No. 1 N.W.C.....	2 59	— 2 80½	2 32	— 2 52	2 00½	— 2 34½	1 85	— 2 03
No. 2 C.W.....	2 55	— 2 76½	2 28	— 2 48	1 96	— 2 30½	1 81	— 1 98
No. 3 C.W.....	2 19	— 2 40½	1 95	— 2 12	1 65	— 1 99½	1 50	— 1 67
Rye—								
No. 2 C.W.....	1 71	— 1 86	1 60	— 1 68	1 60	— 1 72½	1 55	— 1 68½

II. Monthly Range of Prices per bushel of Grain at Selected Markets in the United States, 1920.

(SOURCE: Monthly Crop Report of the U.S. Department of Agriculture.)

Grain and Market.	August.		September.		October.		November.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Wheat, Red, Winter, No. 2—								
St. Louis.....	2 22	—2 62	2 35	—2 68	2 10	—2 39	1 78	—2 33
Chicago.....	2 22	—2 62½	—	—	—	—	1 80	—2 24
New York (f.o.b.) afloat.....	2 50	—2 89	2 53	—2 94	2 15½	—2 52	1 82	—2 41½
Corn, No. 2, mixed—								
St. Louis.....	1 44	—1 73	1 03	—1 51	—	—	0 65½	—0 96
Corn No. 2—								
Chicago.....	1 40	—1 49	—	—	0 81½	—1 10	0 67	—0 94½
Oats, No. 2—								
St. Louis.....	0 69	—0 70	0 55	—0 72	—	—	0 47	—0 55½
Chicago.....	0 68	—0 88½	—	—	0 52½	—0 57½	0 46¾	—0 56¾
Rye, No. 2—								
Chicago.....	1 70	—2 10	—	—	1 60	—1 77½	1 41½	—1 73

III. Prices of Imported Grain and Flour at British Markets, 1920.

(SOURCE: For Mark Lane, London, "The Mark Lane Express," for Liverpool "Broomhall's Corn Trade News.")

Mark Lane.	Nov. 1-29.		Liverpool.	Nov. 2-23.
Wheat—	\$ c.	\$ c.	Wheat—	\$ c.
Canadian No. 1.....	3 60½	—3 62	Nor. Man. No. 1.....	3 68
" No. 2.....	3 51½	—3 53½	" " No. 2.....	3 58½
" No. 3.....	3 40	—3 44½	Man. No. 3.....	3 49½
" No. 4.....	3 37	—3 38½	Red Winter No. 2.....	3 58½
American—			Hard Winter No. 2.....	3 62
Spring.....	3 50½	—3 62		
Hard Winter.....	3 56½	—3 62		
Red Winter No. 2.....	3 51½	—3 53½		
Australian.....	3 84½	—3 85½		
Argentine.....	3 42½	—3 43½		
Oats—				
Canadian.....	1 57½	—1 60½		
American.....	1 55½	—1 57½		
Chilian.....	1 62½	—1 65½		
Flour—				
Canadian Spring.....	22 63	—		
American Spring.....	22 63	—		
" Winter.....	22 63	—		
Australian.....	21 60	—		

¹For Nov. 22, Canadian \$1.47½—\$1.50; American \$1.44½—1.47½; Chilian \$1.55½—1.57½.

IV. Average Prices of British-Grown Grain, 1920.

(SOURCE: "London Gazette," published pursuant to s. 8 of the Corn Returns Act, 1882.)

Week ended	Wheat.		Barley.		Oats.	
	per quarter.	per bushel.	per quarter.	per bushel.	per quarter.	per bushel.
	s. d.	\$	s. d.	\$	s. d.	\$
November 6.....	90 5	2.750	92 10	2.711	53 5	1.415
" 13.....	90 3	2.745	91 8	2.677	52 3	1.385
" 20.....	90 3	2.745	89 7	2.616	51 11	1.376
" 27.....	90 0	2.737	86 1	2.511	48 11	1.296
Average.....	90 3	2.745	90 1	2.628	51 6	1.364

V. Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1920.

SOURCE: For Montreal, Trade Bulletin; for Toronto, Dealers' quotations: for Winnipeg, and U.S. Cities, "The Northwestern Miller," Minneapolis

Month.	Montreal.				Toronto.			
	Flour Manitoba Standard grade.	Flour Ontario del'd at Montreal.	Bran.	Shorts.	Standard Flour (Jute bags).	Standard Flour (Cotton bags).	Bran.	Shorts.
	Per brl. \$	Per brl. \$	Per ton. \$	Per ton. \$	Per brl. \$	Per brl. \$	Per ton. \$	Per ton. \$
1920.								
January.....	13 34	9 75	44 70	52 25	13 25	13 40	45 25	52 25
February.....	13 40	10 90	45 25	52 25	13 25	13 45	45 25	52 25
March.....	13 40	10 76	45 25	52 25	13 25	13 45	45 25	52 25
April.....	13 47	10 76	48 87	50 87	13 40	13 60	51 25	58 25
May.....	14 55	11 38	53 50	60 50	14 85	15 05	54 25	61 25
June.....	14 95	13 25	54 25	61 25	14 85	15 05	54 25	61 25
July.....	14 92	Nominal	54 25	61 25	14 85	15 05	54 25	61 25
August.....	14 95	Nominal	54 25	59 44	14 85	14 55	54 25	59 75
September.....	14 21	Nominal	54 50	49 85	14 25	13 30	40 25	45 25
October.....	12 90	Nominal	44 85	48 95	13 00	12 40	40 25	45 25
November.....	12 90	Nominal	43 95		12 20			

Month.	Winnipeg.				Minneapolis.				Duluth.	
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.	Shorts.	Flour.	Shorts.
	Per bl. \$	Per ton. \$	Per ton. \$	Per bl. \$	Per ton. \$	Per ton. \$	Per bl. \$	Per ton. \$	Per bl. \$	Per ton. \$
1920.										
January.....	12 65	39 00	46 00	14 53	41 58½	42 70	14 18	44 37	14 18	44 37
February.....	12 65	39 00	46 00	13 41	41 20	42 70	13 35	43 37½	13 35	43 37½
March.....	12 65	39 00	46 00	13 37½	41 25	43 37½	13 55	43 83	13 55	43 83
April.....	12 76½	43 50	50 50	14 55	47 00	48 25	14 25	48 50	14 25	48 50
May.....	13 64	46 80	53 80	15 28	51 01	51 50	14 95	52 87½	14 95	52 87½
June.....	13 64	48 00	55 00	15 28	51 01	51 50	14 95	52 87½	14 95	52 87½
July.....	14 30	48 00	55 00	15 28	51 01	51 50	14 95	52 87½	14 95	52 87½
August.....	14 30	48 00	55 00	15 28	51 01	51 50	14 95	52 87½	14 95	52 87½
September.....	13 20	48 00	53 00	12 32	48 00	50 00	12 35	48 00	12 35	48 00
October.....	12 84	45 00	50 00	12 70	45 00	48 00	12 31½	45 00	12 31½	45 00
November.....	11 77	41 00	46 00	10 90	41 00	43 75	11 00	41 00	11 00	41 00

NOTE.—The ton = 2,000 lb. and the barrel = 196 lb.

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	June.	July.	Aug.	Sept.	Oct.	Nov.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Montreal—						
Steers, heavy finished.....	15-75	—	—	—	—	—
Steers, 1,000-1,200 lb., good.....	15-9125	14-50	11-82	11-72	10-22	9-60
Steers, 1,000-1,200 lb., common.....	—	12-00	11-27	—	—	—
Steers, 700-1,000 lb., good.....	14-6875	13-65	11-00	11-00	9-73	9-08
Steers, 700-1,000 lb., common.....	12-8125	10-95	9-00	8 57	7-20	7-73
Heifers, good.....	14-0625	12-70	70-25	10 41	9-15	9-16
Heifers, fair.....	11-75	10-40	8-67	8 48	7-30	7-49
Heifers, common.....	9-125	7-70	7-22	7 43	6-28	5-87
Cows, good.....	11-8125	10-65	9-28	8 94	7-86	7-69
Cows, common.....	9-25	7-75	6-73	6 83	5-93	5-95
Bulls, good.....	11-625	10-583	9-26	8 25	—	—
Bulls, common.....	9-50	6-70	5-88	5 65	5-19	4-50
Canners and Cutters.....	6-3125	4-75	4-24	4 00	3-75	3-42
Oxen.....	12-50	10-00	—	11 50	—	7-28
Calves, veal.....	12-5625	10-20	11-98	13 76	13-51	13-55
Calves, grass.....	8-25	7-25	6-46	6 76	5-87	5-32
Stockers, 450-800 lb., good.....	—	—	—	—	—	—
Stockers, 450-800 lb., fair.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., good.....	—	—	—	—	—	—
Feeders, 800-1,100 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	20-4375	21-04	20-77	—	19-54	17-59
Hogs (fed and watered), heavies.....	19-516	18-875	18-41	—	—	14-00
Hogs (fed and watered), lights.....	—	18-90	—	—	—	13-26
Hogs (fed and watered), sows.....	16-337	16-87	16-30	16 09	15-64	—
Hogs (fed and watered), stags.....	—	13-90	—	—	—	—
Lambs, good.....	18-1666	14-90	12-71	12 60	12-15	12-64
Lambs, common.....	—	13-125	10-66	11 21	10-53	10-98
Sheep, heavy.....	10-925	8-62	7-16	6 90	6-50	6-14
Sheep, light.....	9-50	7-45	6-68	6 30	5-41	5-04
Toronto—						
Steers, heavy, finished.....	15-195	15-55	14-04	—	13-35	10-96
Steers, 1,000-1,200 lb., good.....	14-85	14-65	12-91	12 41	10-78	10-05
Steers, 1,000-1,200 lb., common.....	12-64	12-50	10-75	8 63	8-25	8-25
Steers, 700-1,000 lb., good.....	14-84	14-20	11-43	10 52	9-77	9-23
Steers, 700-1,000 lb., common.....	11-8225	11-85	10-37	8 79	7-89	6-05
Heifers, good.....	14-60	14-05	12-83	17 03	10-50	10-17
Heifers, fair.....	13-142	12 15	10-61	8 93	7-50	8-09
Heifers, common.....	10-775	9-75	8-64	7 44	6-50	6-53
Cows, good.....	12-8125	11-90	10-29	10 32	9-45	7-82
Cows, common.....	11-0825	9-75	8-06	7 33	6-44	5-82
Bulls, good.....	12-172	11-20	8-90	9 90	8-50	8-16
Bulls, common.....	10-112	8-70	6-91	7 16	6-00	5-06
Canners and Cutters.....	5-855	4-90	4-33	4 63	5-00	4-38
Oxen.....	—	—	—	—	—	—
Calves, veal.....	15-58	16-85	17-50	17 98	17-71	16-58
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	11-557	9-85	9-00	9 00	8-50	8-14
Stockers, 450-800 lbs., fair.....	10-15	8-60	8-00	8 00	8-00	7-61
Feeders, 800-1,000 lb., good.....	12-912	11-65	11-63	11 07	10-50	9-76
Feeders, 800-1,000 lb., fair.....	11-082	10-125	9-64	9 60	—	9-40
Hogs (fed and watered), select.....	19-59	20-60	20-39	20 60	19-71	16-19
Hogs (fed and watered), heavies.....	18-617	19-6875	19-57	19 73	19-22	15-43
Hogs (fed and watered), lights.....	17-7533	18-60	18-18	18-85	17-99	14-97
Hogs (fed and watered), sows.....	15-425	16-80	16-33	10 86	15-81	12-92
Hogs (fed and watered), stags.....	14-25	—	—	—	—	—
Lambs, good.....	19-1675	17-25	14-87	13 70	12-70	12-53
Lambs, common.....	17-385	15-10	10-77	9 46	9-89	9-13
Sheep, heavy.....	—	—	9-50	10 00*	8-69*	—
Sheep, light.....	12-18	10-45	8-46	7 79	7-06	6-24
Sheep, common.....	7-535	7-45	6-32	4 83	4-43	4-19
Winnipeg—						
Steers, heavy, finished.....	15-227	12-30	11-19	10 83	8-53	8-34
Steers, 1,000-1,200 lb., good.....	14-495	11-746	10-57	10 49	8-88	8-62
Steers, 1,000-1,200 lb., common.....	10-00	8-96	7-81	7 60	6-42	5-80
Steers, 700-1,000 lb., good.....	13-3975	10-70	9-27	9 34	3-01	7-97
Steers, 700-1,000 lb., common.....	9-00	7-708	6-68	6 66	5-87	5-42
Heifers, good.....	13-3825	10-88	9-77	9 51	7-56	6-96

* Yearlings.

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

Source: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	June.	July.	Aug.	Sept.	Oct.	Nov.
Winnipeg—con.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Heifers, fair.....	10-29	8-488	7-60	7-34	6-07	5-43
Heifers, common.....	7-56	6-148	5-50	5-61	4-06	4-32
Cows good.....	11-445	9-484	8-60	8-41	6-77	6-22
Cows, common.....	8-6875	7-026	6-20	6-22	5-21	4-67
Bulls, good.....	9-282	6-696	6-22	6-03	5-79	4-92
Bulls common.....	6-778	5-443	5-11	5-18	4-30	3-95
Canners and cutters.....	4-3725	3-886	3-60	3-91	3-59	3-10
Oxen.....	8-25	7-128	6-44	6-75	5-35	5-25
Calves, veal.....	11-5475	10-572	9-07	8-87	7-22	5-60
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8-91	7-418	6-31	6-33	5-94	5-63
Stockers, 450-800 lb., fair.....	7-145	6-012	5-12	5-19	4-88	4-49
Feeders, 800-1,100 lb., good.....	10-365	9-546	8-55	8-65	8-02	7-54
Feeders, 800-1,100 lb., fair.....	8-852	7-534	6-57	6-74	6-12	5-80
Hogs (fed and watered), select.....	19-395	18-50	19-73	21-03	18-69	15-21
Hogs (fed and watered), heavies.....	17-252	16-492	17-23	18-33	16-24	12-55
Hogs (fed and watered), lights.....	17-1125	16-674	17-94	20-35	16-57	13-02
Hogs (fed and watered), sows.....	15-367	14-504	15-25	15-88	13-45	8-71
Hogs (fed and watered), stags.....	13-245	17-492	12-16	12-43	11-91	7-47
Lambs, good.....	15-995	17-974	12-53	11-61	9-53	8-81
Lambs, common.....	—	8-25	7-50	8-12	6-63	5-63
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	12-6075	9-658	7-77	7-56	6-22	5-35
Sheep, common.....	7-88	6-476	4-87	5-27	4-53	3-52
Calgary—						
Steers, heavy, finished.....	14-083	11-00	9-85	10-78	7-97	7-90
Steers, 1,000-1,200 lb., good.....	13-00	10-30	9-64	9-55	7-30	7-54
Steers, 1,000-1,200 lb., common.....	12-85	—	7-22	7-46	6-59	6-05
Steers, 700-1,000 lb., good.....	12-8333	—	8-68	8-02	6-66	6-49
Steers, 700-1,000 lb., common.....	—	—	7-19	7-09	5-79	5-98
Heifers, good.....	13-25	8-25	7-86	7-78	6-19	6-12
Heifers, fair.....	—	—	7-42	6-78	5-50	5-46
Heifers, common.....	—	—	6-25	6-69	5-00	4-50
Cows, good.....	12-0625	8-96	7-58	7-94	6-32	6-83
Cows, common.....	8-35	7-138	6-31	5-36	5-00	4-93
Bulls, good.....	—	—	5-43	5-93	5-19	4-46
Bulls, common.....	5-50	5-00	—	5-06	4-50	4-02
Canners and cutters.....	—	—	3-88	4-00	3-75	3-21
Oxen.....	—	—	—	6-75	—	—
Calves, veal.....	13-50	11-716	9-62	10-19	8-92	7-11
Calves, grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	9-187	8-33	7-68	7-43	6-13	6-15
Stockers, 450-800 lb., fair.....	8-037	7-61	6-60	6-40	5-43	5-19
Feeders, 800-1,100 lb., good.....	10-525	9-85	9-06	8-61	7-24	6-74
Feeders, 800-1,100 lb., fair.....	9-50	9-05	8-10	7-94	16-71	6-26
Hogs (fed and watered), select.....	19-525	17-90	19-34	22-30	20-89	15-81
Hogs (fed and watered), heavies.....	19-25	16-85	18-09	20-75	18-25	14-00
Hogs (fed and watered), lights.....	19-1725	17-30	17-78	18-81	17-70	13-05
Hogs (fed and watered), sows.....	16-275	14-90	18-27	19-89	18-98	12-44
Hogs (fed and watered), stags.....	—	12-25	13-15	—	—	—
Lambs, good.....	—	13-375	11-02	10-46	10-60	10-24
Lambs, common.....	—	11-00	8-77	9-00	8-00	8-00
Sheep heavy.....	—	8-50	—	—	—	—
Sheep, light.....	13-50	9-083	9-72	7-39	7-25	7-21
Sheep, common.....	—	—	7-00	6-50	6-50	6-25
Edmonton—						
Steers, heavy, finished.....	—	—	9-25	9-00	8-25	8-25
Steers, 1,000-1,200 lb., good.....	12-8125	10-50	8-80	8-46	7-42	7-25
Steers, 1,000-1,200 lb., common.....	11-125	9-4375	7-16	6-65	5-41	5-20
Steers, 700-1,000 lb., good.....	11-75	9-50	7-68	7-54	6-94	6-50
Steers, 700-1,000 lb., common.....	10-1666	8-875	6-18	5-88	4-50	4-50
Heifers, good.....	12-25	9-417	7-30	7-40	6-16	5-75
Heifers, fair.....	10-4	8-8125	6-42	6-41	5-55	5-00
Heifers common.....	9-375	7-90	5-22	4-81	4-50	4-25
Cows, good.....	11-50	8-85	7-23	6-94	6-43	5-67
Cows, common.....	9-1666	7-00	5-48	5-00	4-92	4-45
Bulls, good.....	7-833	6-00	5-30	5-00	5-00	4-36
Bulls, common.....	7-125	4-75	4-28	4-25	4-25	—
Canners and cutters.....	—	—	—	—	3-20	3-00

VI. Average Monthly Prices of Canadian Live Stock at Principal Markets, 1920—con.

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	June.	July.	Aug.	Sept.	Oct.	Nov.
Edmonton—con.						
Oxen.....	—	—	—	—	—	—
Calves veal.....	14-00	10-60	9-23	8 99	8-42	7-03
Calves grass.....	—	—	—	—	—	—
Stockers, 450-800 lb., good.....	8-375	7-50	6-56	6 58	5-33	5-32
Stockers, 450-800 lb., fair.....	7-437	6-40	5-31	5 50	5-16	4-50
Feeders, 800-1,000 lb., good.....	10-375	9-15	—	—	—	—
Feeders, 800-1,000 lb., fair.....	—	—	—	—	—	—
Hogs (fed and watered), selects.....	19-3125	17-85	19-21	21 89	20-80	15-19
Hogs (fed and watered), heavies.....	18-312	16-813	17-82	19 16	17-45	11-75
Hogs (fed and watered), lights.....	17-0625	15-813	17-25	17 89	17-16	11-65
Hogs (fed and watered), sows.....	17-062	15-85	16-93	18 09	18-27	11-28
Hogs (fed and watered), stags.....	15-375	14-00	—	—	—	—
Lambs, good.....	—	13-00	9-07	10 28	9-05	9-35
Lambs, common.....	10-00	10-75	7-40	8 34	7-00	7-33
Sheep, heavy.....	—	—	—	—	—	—
Sheep, light.....	13-00	10-00	7-63	8 20	7-77	6-86
Sheep, common.....	—	8-25	5-43	5 30	6-00	5-50

VII. Average Prices of Milk in Principal Canadian Cities, 1919-20.

SOURCE: Dealers' Quotations.

Description.	Halifax, N.S.	Montreal, P.Q.	Toronto, Ont.	Winnipeg, Man.	Vancouver B.C.
Price paid to Producers.	Cents per gallon.	Cents per gallon.	Per 8 gall. can.	Per cwt. ¹	Per lb. butter fat.
Winter..... 1919	40	35	\$ c. \$ c. 2 80	\$ c. 2 95	\$ c. 1 10
Spring and summer..... 1919	40	30	2 25-2 55	2 95	1 00
Fall and winter..... 1919-20	40	40	3 10	3 40	1 10
Spring and summer..... 1920	40	31	2 35-2 70	Per 10 gals. ² 3-502	1 10
³ Fall and winter..... 1920-21	44	37	2 90	4-017	—
Wholesale price to hotels, stores, etc.—	Cents per quart in cans. Cents per quart in cans.	Cents per quart.	Cents per gallon.	Cents per gallon.	Cents per gallon.
Winter..... 1919	13½ 14	—	44	45	45-50
Spring and summer..... 1919	13½ 14	—	40	45	45-50
Fall and Winter..... 1919-20	13½ 14	—	43	49	45-50
Spring and Summer..... 1920	13½ 14	—	43-44	43	45-50
³ Fall and winter..... 1920-21	15 16	—	56	52-54	45-50
Retail Price per single Quart Cash—	Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.	Cents per quart.
Winter..... 1919	15	14	15	13	15
Spring and summer..... 1919	15	13	14	13	15
Fall and winter..... 1919-20	15	16	16	15	15
Spring and summer..... 1920	15	14-16	15	15	15
³ Fall and winter..... 1920-21	17	16	16	16	16

¹Testing 3-6 p.c.²103 lb.³Preliminary.

IX. Wholesale Prices per lb. of Produce as on the 15th of Each Month, at Principal Markets, 1920.

SOURCE: Dealers' quotations.

Description.	June.	July.	Aug.	Sept.	Oct.	Nov.
	cents.	cents.	cents.	cents.	cents.	cents.
Montreal—						
Hams, smoked—light, under 20 lb....	45	48	50	50	49	45
Bacon, light under 12 lb.....	49	53	50-53	52	51	48
Barrelled mess pork.....	24	75	22½	21½	19½	19
Beef, carcass fresh (No. 1) Butcher (good steers and heifers).....	27-27½	28½	27½	26½	24½	23
Barrelled, plate beef.....	15	10½	16½	16½	16½	15
Lambs, yearlings.....	—	34	26-28	27-29	27-29	27-30
Sheep, good.....	27-29	24	20-22	20-22	20-22	20-22
Lard, tierces.....	28½	38½-30½	29¾	31	32¾	32
Butter, creamery prints.....	58	60-61	61	62	58	58
Butter, creamery solids.....	57	59-60	60	61	57	56
Butter, dairy prints.....	57	—	—	—	—	—
Eggs, fresh, select.....	—	60-64	66	68	68	68
Cheese, large, coloured, new.....	—	31	31	36 (old)	36 (old)	29
Toronto—						
Hams, smoked, light, under 20 lb....	40	47	46	46	48	42
Bacon, light, under 12 lb.....	48-49	52	48-49	50	51	51
Barrelled mess pork.....	27	27	24	23	21½	21½
Beef, carcass, fresh (No. 1) butcher (good steers and heifers).....	26	28	28	27	26	24
Barrelled plate beef.....	18½	18½	18½	51	15	15
Lambs, yearlings.....	32-24	28-30	28-30	26-29½	26½-29	24-27
Sheep, good.....	—	15-22	13-19	13-20	13-18	13-17
Lard, tierces.....	29	29	27½	28	31¼	28½
Butter, creamery prints.....	57	60	61	62	64	60
Butter, creamery solids No. 1.....	56½	59½	60½	61½	63½	59½
Butter, dairy prints.....	50	50	51	51	51	—
Eggs, fresh, specials.....	57	59	65	66	63	72
Cheese, large, coloured, new.....	32½	31	31	30	30	29
Winnipeg—						
Hams, smoked, light, under 20 lb....	39-40½	46	46-48	46-48	44-46	42-44
Bacon, light, under 12 lb.....	50	49½	49½	49½	49½	47½
Barrelled mess pork.....	25½	25½	25½	25½	21½	20½
Beef, carcass, fresh (No. 1) butcher (good steers and heifers).....	28	21	22	20	20	18
Barrelled plate beef.....	—	—	—	18½	18½	18½
Lard tierces.....	28½	30	30	29½	34	30
Butter, creamery prints.....	59	61	60-63	62	59-62	59-62
Butter, creamery solids.....	58	60	58	60	57-60	57-60
Butter, dairy prints.....	48	52	52	50-51	55	—
Eggs, fresh.....	50	57	63	65	63	68
Vancouver—						
Hams, smoked, light, under 20 lb....	48-49	49-50	50-51	50-52	50-52	47-51
Bacon, light, under 12 lb.....	50	52	53	54	54	51
Barrelled mess pork.....	30	30	30	30	30	30
Beef carcass, fresh (No. 1) butcher, (good steers and heifers).....	27	23½	24	20	18	17
Barrelled plate beef.....	18	—	18	18	18	18
Sheep, good.....	28	28	25	25	23	24
Lard, tierces.....	29½	29½	30	30	30	30
Butter, creamery prints.....	61	62	52-64	62	62	61
Butter, creamery solids.....	60	58-60	61	61	60	59
Butter, dairy prints.....	51	51	53	50	50	—
Butter, dairy solids.....	51	50	52	49	49	—
Eggs, fresh, select.....	56	58	65	78	90	—
Cheese, large, new.....	33	33	33	32	32	31½

SCHEME OF CROP-REPORTING FOR THE YEAR 1921

(Subject to revision, if necessary.)

January.—Farm values, including values of farm land, wages of farm help and values of farm live stock, including poultry.

March.—Farm products on hand and percentage of merchantable quality. Condition of live stock.

April.—Areas winter killed of fall wheat, hay and clover. Condition of the growing crops of fall wheat and of hay and clover. Progress of seeding operations (spring wheat, oats and barley). Dates of sowing and of appearance of wheat above ground.

May.—Preliminary estimate of areas sown to spring wheat, oats, barley, rye, peas, mixed grains, hay and clover, alfalfa and pastures. Condition of these crops and also of fall wheat. Dates of sowing and of appearance of wheat above ground.

June.—Revised estimate of areas sown to spring wheat, oats, barley, rye, peas, mixed grains, hay and clover, alfalfa and pastures. Condition of these crops and of fall wheat. Areas of late-sown cereals and hoed crops, including buckwheat, flax, corn for husking, beans, potatoes, turnips, sugar beets, mangolds, carrots, etc., and corn for fodder. Dates of sowing and of appearance above ground of wheat. Dates of heading, flowering and milk-stage of wheat.

July.—Preliminary estimate of the yield per acre of fall wheat, hay and clover and alfalfa. Condition of spring wheat, oats, barley, rye, peas, beans, buckwheat, mixed grains, flaxseed, corn for husking, potatoes, turnips, mangolds, carrots, etc., hay and clover, alfalfa, corn for fodder, sugar beets and pasture. Dates of heading, flowering, milk-stage and cutting of wheat.

August.—Estimate of the yield per acre of spring wheat, rye, oats, barley and flax. Estimate of areas sown to these cereals that from any cause will not produce a crop. Condition of spring wheat, oats, barley, rye, beans, buckwheat, mixed grains, flaxseed, corn for husking, potatoes, turnips, mangolds, carrots, etc., hay and clover, alfalfa, corn for fodder, sugar beets and pasture. Dates of heading, flowering, milk-stage and cutting of wheat. Stocks of wheat, oats and barley in hand on August 31.

September.—Estimate of the yield per acre of fall wheat, spring wheat, oats, barley, rye, peas, beans, buckwheat, mixed grains, flaxseed and corn for husking. Quality of these crops when harvested. Condition of potatoes, turnips, mangolds, carrots, etc., sugar beets, corn for fodder and alfalfa. Date of cutting of wheat.

October.—Yield per acre, quality and average price of potatoes, sugar beets, turnips, corn for husking, other roots (mangolds, carrots, etc.) hay and clover, fodder corn and alfalfa. Acreage sown to fall wheat. Condition of fall wheat. Percentage of fall ploughing completed. Acreage summer-fallowed in percentage of previous year.

December.—Final estimates of yields per acre based upon reports of threshing results. Average market prices and weight per measured bushel of cereals.

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